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ABSTRACT

Intended to assist in the vocational education and employment of individuals who are handicapped, this catalog contains descriptions and illustrations of modified tools, equipment, and machinery for use in 38 areas. These use areas are arts, assembly, assessment, automobile repair, benchwork, communication, computer processing, cosmetology, dictation, duplicating and printing, eating, education, electronics, environmental control, food preparation, gardening, health, kitchen work, laundering, listening, machine trades, maintaining balance, mathematics, measuring, mobility, money exchange, packaging, reaching, reading, recreation, safety, sewing, shopping, transportation, typing, work tables, and writing. Each piece of equipment is pictured along with information on how it works, its developer, place of use, field testing regulatory approval, warranty, availability, source, price, and role in helping the handicapped overcome specific problems. Equipment is cross referenced by use and by seven disability categories (hearing impaired, learning disabled, mentally retarded, multiply handicapped, physically handicapped, speech impaired, visually impaired). Appendixes contain information on modifications to accomodate disabled persons at nine different worksites as well as lists of additional available resources, organizations serving the handicapped, postsecondary educational institutions serving the handicapped, relevant classroom materials, and publications and equipment distribution outlets. (MN)

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TOOLS, EQUIPMENT AND MACHINERY
ADAPTED FOR THE VOCATIONAL EDUCATION
AND
EMPLOYMENT OF HANDICAPPED PEOPLE

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INTRODUCTION

This catalog has been prepared to assist in the vocational education and employment of individuals who are handicapped. We have collected descriptions and illustrations of modified tools, equipment and machinery. We have also included examples of adaptive devices which were developed to overcome an individual's specific handicaps in specific work or educational settings. Listed items were obtained not only from companies who produce and distribute adapted equipment, but also from individuals who have used their ingenuity to overcome unique training or employment barriers. Often, with a bit of creative problem solving, a disabled student or employer is no longer handicapped.

We feel that this catalog should not only serve as a guide to commercially available equipment but should also function as a stimulus to all of you who are responsible for the vocational education or employment of individuals who are handicapped. We hope to provide you with ideas and incentives to create your own solutions to educational and employment problems faced by handicapped persons.

ACKNOWLEDGMENTS

We would like to thank all the individuals who helped us prepare this catalog. We would especially like to acknowledge Dr. Lloyd Tindall, Supervisor, Handicapped Projects Unit, Wisconsin Vocational Studies Center, for his help in developing the proposal for this contract and advising us on its implementation. We would also like to thank Dr. Vasant Kumar, Coordinator, Office of Research, Grants and Contracts at Wisconsin Indianhead VTAE District, for his work in preparing the contract proposal and for supervising the subcontract work at Indianhead. A special thank you goes to Denise Wagner, Judy Peterson and Terri Bleck, WVSC and Val Konop, Indianhead VTAE District for their typing. Also a kudo to Terri Bleck for the cutting and mounting of the photographs. Our appreciation to the people who helped with the details of reading the catalog for print. Lastly, our thanks to all of you who contributed material for the catalog. Your interest and assistance is greatly appreciated.

AVA AMERICAN VOCATIONAL ASSOCIATION

Dear Reader:

It has been said that vocational educators are inflexible and unwilling to work with other professionals and employers to bring about necessary changes in their programs. This catalog is evidence that this perception is not true.

Vocational educators and employers have discovered that few, if any, changes are necessary in order to employ persons who are handicapped and that investments which are made are of benefit to all of us.

When changes are needed, this catalog can serve as a resource of ideas to make modifications. Some of the modifications found in the catalog concern changes in the work environment. Others are changes to specific products used at the worksite. Often, adaptations are custom-made for an individual.

In using the catalog, one should not be restricted by the categorization, but should review all possible entries to find the suitable adaptation.

The American Vocational Association urges vocational educators and employers to become acquainted with these materials and then to educate and hire handicapped persons. This catalog will assist all of us in reaching this goal.

Sincerely,

Eugene Lehrmann

Eugene I. Lehrmann
President, American Vocational
  Association

c

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University of Wisconsin - Madison 964 Educational Sciences Building • Madison, WI 53706

Phone: 608-263-3696

Dear Vocational Instructor:

This catalog of modifications is a step towards the elimination of inequalities between the job opportunities for handicapped and non-handicapped individuals through the availability of modified tools, equipment and machinery. Overcoming these inequalities is more than physical changes. Acceptance and a willingness to understand and work with handicapped students on an equal basis are also key factors. Hopefully, this catalog will help to further the perception that people are more alike than different.

Often after making a modification for one student, instructors receive requests from other students for similar modifications. As you look through this catalog you may see items that will trigger your imagination. Let your imagination wander without feeling restricted by the categories or labels of a specific item. You may find that an item designed to overcome one problem can be used to overcome other problems. Students are a resource in themselves when it comes to modifying tools, equipment or machinery. Ask for their assistance in finding ways to adapt items to their individual needs.

Use this catalog as a starting point for selecting those modifications which are appropriate to your teaching situation. Instructors in other vocational areas may be able to assist you in implementing the modifications you wish to make. You in turn may have an expertise which will help them.

The catalog is not the sole answer to all problems, but can be an aid in the process of working with handicapped students. Hopefully it will be of value in developing your teaching techniques and strategies.

Sincerely,

Lloyd W. Tindall

Lloyd W. Tindall
Project Associate

LWT/jp

DISCLAIMERS

Endorsement

By including particular products in the catalog, we are indicating only that they exist. We have not tested or evaluated any of the products. We do not know how well they work, how durable they are, or how effective they would be in solving the education or employment problems of a specific individual.

Field Tested

We define "field test" as a formal evaluative process in which the effectiveness of a piece of equipment or a product was demonstrated in a controlled setting when compared to rival devices or to an appropriately selected control group which did not have access to these products.

Many contributors stated that their products were "field tested", but not whether this test was conducted formally in a controlled setting. In such cases we cited their answer verbatim. "Yes" answers alone may refer to any type of field test, not just formal field tests.

Patent

The reader should be aware that some products are being considered for or have a patent.

Prices

The prices have been listed when available. They are the prices in effect at the time we collected the information. It is likely that by the time you read this catalog, the prices on some of the products will be changed.

NOTE TO EMPLOYERS, TEACHERS, EMPLOYEES AND STUDENTS

Employers and employees, teachers and students, should have reasonable expectations of the products in the catalog. The equipment described in this catalog cannot solve all the problems, or eliminate all the barriers facing a handicapped person.

Likewise, an employer or teacher should not think that by purchasing a piece of adaptive machinery he or she has done all that is needed. Appropriate attitudes are very important. So is common sense. Different areas of work or study may be more difficult for everyone, regardless of handicap. A piece of equipment should not be viewed as the total answer. Proper identification of the problem, proper selection of equipment (if the problem warrants it), appropriate instruction in its use, correct installation, and suitable integration with other aspects of the training or employment environment are all factors which influence how helpful this catalog will be.

We view the catalog as a tool. We hope that it will not only provide you with useful information but will also give you ideas to help you adapt other machines and equipment.

If other pieces of machinery, equipment and tools besides those listed have been created, we did not know of them and regret that they were not included. The authors are interested in learning of any products which were regrettably left out. We would also like updated information on products appearing in the catalog.

ORGANIZATION OF THE CATALOG

The catalog page is designed to give essential information about a particular item. Each catalog page is divided for easy reading and for quick evaluation of the product's usefulness. The name of the item is at the top of the page. The items in the catalog are listed by functional use.

The Developer refers to the person or company responsible for creating the modification or adaptation.

The Contact Person is the person who can most easily give information about the product. Often this person is the same as the Developer.

The section labeled Where It Is Used is intended to help the reader decide if a product is relevant to his or her needs. We have attempted to list the occupational area(s) that were most affected. Often the item is applicable to many areas.

The Problem(s) It Overcomes section describes reasons why the product was produced.

Some of the items have been field tested. If they have, it is noted in the section Field Tested. The type of field testing varies among product developers.

Regulatory agency is indicated in the Regulatory Approval section.

The Warranty Provided section refers to products available commercially and indicates if a warranty is provided for that product. For specifics on length of warranty and what it covers, write to distributor.

The For Sale section gives the price of items when available. Where applicable, the estimated cost of materials for items that are individually made or not available commercially will be given. The prices may vary in your area. The amounts given are meant to be used only as a guide. Prices have possibly increased since the printing of this catalog. Please contact a distributor prior to sending a prepaid order.

The How It Works section explains how that catalog item solves the problem it was designed to overcome. This space also further explains the purpose of the item.

The photograph or sketch of the item described is on the left hand page. This will give the user a visual explanation of the product and an indication of how it works to eliminate a handicap.

For the user's convenience, there is a Cross-Reference section located at the front of the catalog that will make it possible to look up catalog items by disability categories and categories of use.

The Appendices list potential sources of additional information or assistance. There are also examples of how a work environment could be arranged to suit the needs of a disabled employee.

An Index can be found at the back of the catalog which lists the items in alphabetical order by product name.

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GUIDE TO THE CROSS REFERENCES

Products in this catalog are applicable to a variety of people and skills. The cross references attempt to list the tools, equipment and machinery in relation to seven disability categories and 27 categories of use. Hopefully, this scheme will aid the reader in identifying products which are usable for a designated disability and skill area.

Products in the first cross reference have been placed into a disability area if the adaptation helps the person with that disability to more easily use the product. However, creative thinking will help you realize it will apply to other areas as well.

The following disability categories are used in the first cross reference:

- Hearing Impaired
- Learning Disabled
- Mentally Retarded
- Multiply Handicapped
- Physically Handicapped
- Speech Impaired
- Visually Impaired

The second cross reference lists products according to use. The categories listed are the same as those in the Table of Contents.

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Keyboard Guard 652
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Measuring Device for Woodworking - Dadoing 402
Measuring Device for Woodworking - Shelf and Paneling Measurement 404
Measuring Devices for Woodworking - Table Saw Guide 406
The Modification of a Handheld Heat Sealer 522
Optical Projection Equipment 410
Portable Magnetic Graphics Display Board 286
Sanding Jig 138
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Stanley Drill Guide 424
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Easy Grasp Pencils 680
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Radial Arm Assistive Device for Hand Held Tools 414

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Rug Hooking Holder for the Wheelchair 76

Sensory Quill 78

Sit-Down Potter's Wheel Stand 80

Spiral Finger Pick 82

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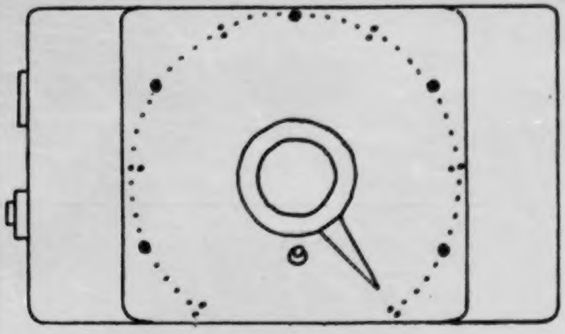
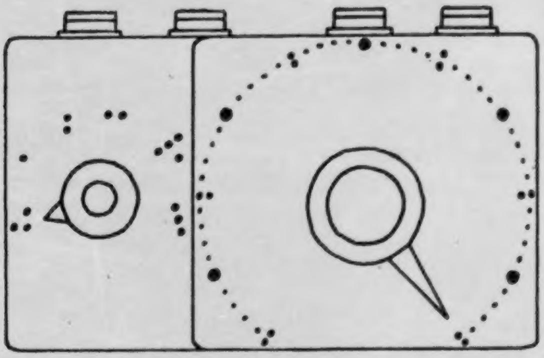
AUD-A-METER



Single Channel AUD-A-METER



4-CHANNEL AUD-A-METER

Illustration courtesy of
Science for the Blind
Products

AUD-A-METER

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind
Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

Meter reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

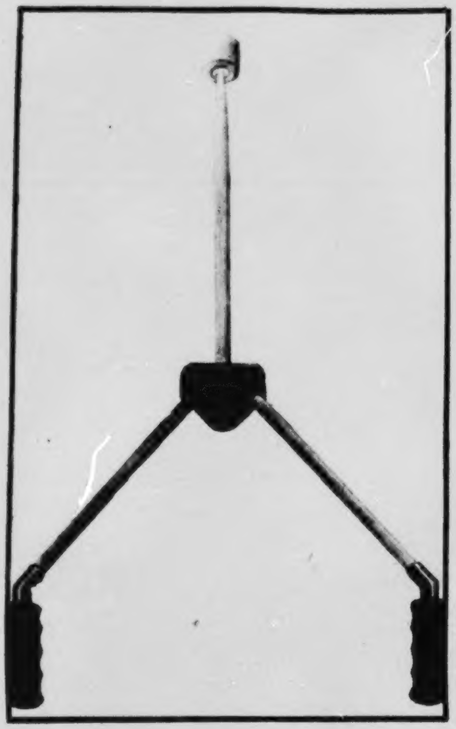
Single channel AUD-A-METER	$ 90.00
4-Channel AUD-A-METER	$215.00

HOW IT WORKS

The Single Channel Aud-A-Meter may be connected across the terminals of any electrically driven visual meter movement in order to allow reading to be taken by correlating an auditory signal with a braille scale. Sensitivity of approximately 150 millivolts allows the Aud-A-Meter to be used satisfactorily with almost any visual meter movement, DC application only. The 4-channel Aud-A-Meter can be connected to four different meters at once and is particularly applicable to broadcast use, where several meters must be monitored.

(Information based on Science for the Blind literature.)

BICYCLE GRIP BILATERAL BEATER



Photograph courtesy of
Modulations Co.

BICYCLE GRIP BILATERAL BEATER

DEVELOPER

Donna Chadwick

CONTACT PERSON

Modulations Co.
9 Sawmill Dr.
Westford, MA 01886
(617) 692-6590

WHERE IT IS USED

Play percussion instruments

PROBLEM(S) IT OVERCOMES

limited motor control of upper extremities

FIELD TESTED

yes

Northshore Consortium - Salem, MA

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

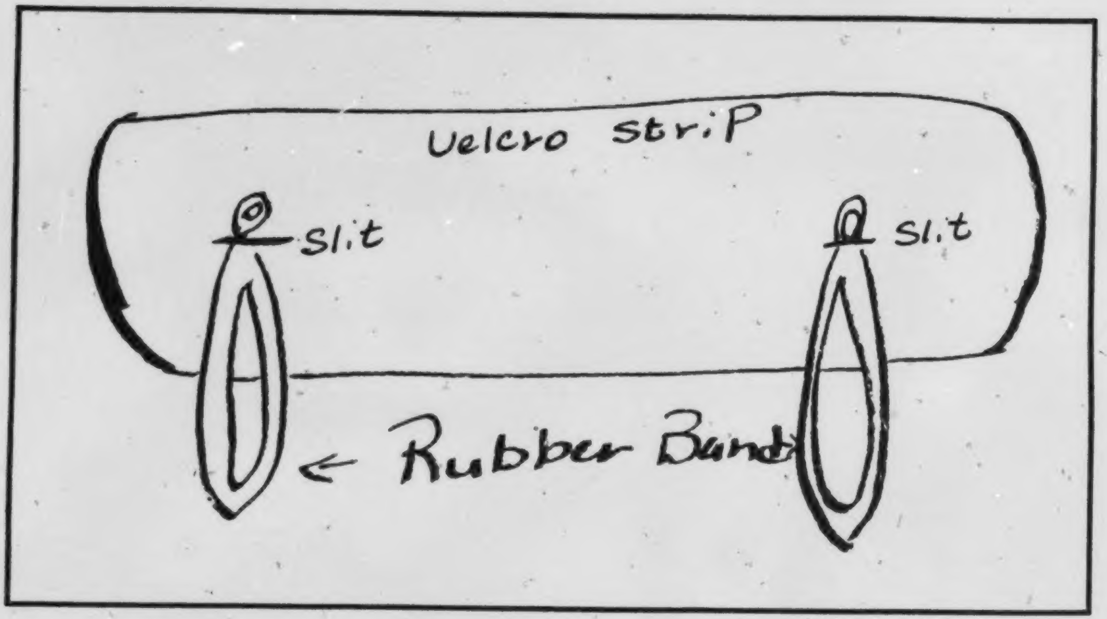
HOW IT WORKS

This beater is made from a 12-inch long wooden shaft, topped by a hard felt ball tip. This piece embeds into a wooden triangular joint, which also connects to two extended wooden handles. Any rubber handle, designed for use as a bicycle grip can be fitted over the wooden dowel ends. The apparatus is 20 inches long.

This design should not be used for work with people who are flexion bound.

(Information based on Clinically Adapted Instruments for the Multiply Handicapped, Clark and Chadwick.)

BRUSH OR PEN HOLDER


Velcro strip
slit
slit
Rubber Band

Sketch by Shirle Hoover

BRUSH OR PEN HOLDER

DEVELOPER

Shirle Hoover, ART ATC
West Texas Rehabilitation Center
4601 Hartford
Abilene, TX 79605
(915) 692-1633

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Painting
Writing

PROBLEM(S) IT OVERCOMES

difficulty grasping

FIELD TESTED

not applicable

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

Rubber bands are attached to a strip of velcro which wraps around the user's wrist. The rubber bands are used to secure the writing or drawing implement.

(Information provided by Shirle Hoover.)

CAMERA HOLDING/OPERATING SYSTEM FOR HEMIPLEGIC PHOTOGRAPHER

Photograph not available

CAMERA HOLDING/OPERATING SYSTEM FOR HEMIPLEGIC PHOTOGRAPHER

DEVELOPER

Clinical Convenience Products
Contracting Serv. Div.
2070 Helena Street
Madison, WI 53704
(608) 251-2882

CONTACT PERSON

Don Warren
2070 Helena Street
Madison, WI 53704
(608) 251-2882

WHERE IT IS USED

Photography

PROBLEM(S) IT OVERCOMES

inability to hold the camera and operate the shutter, film winder and focus concurrently

FIELD TESTED

yes

used by individual it was designed for - professional photographer

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Clinical Convenience Products
2070 Helena Street
Madison, WI 53704

$150.00

HOW IT WORKS

Camera is attached to a portable, wearable camera pod which was custom fitted to the specific individual. The pod could be attached, removed and operated by this individual. All camera functions and formats can then be controlled by the individual with one hand because pod anchors the camera firmly.

(Information provided by Ricardo Cerna, Rehabilitation Engineering Specialist, Wisconsin Division of Vocational Rehabilitation, and Don Warren.)

FOOT PICK

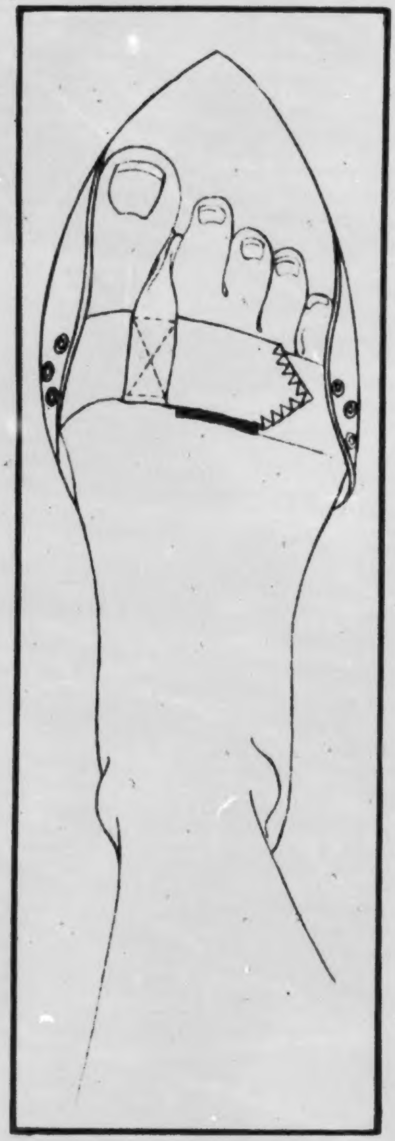


Illustration courtesy of
Modulations Co.

FOOT PICK

DEVELOPER

Cynthia Clark

CONTACT PERSON

Modulations Co.
9 Sawmill Drive
Westford, MA 01886
(617) 692-6590

WHERE IT IS USED

Play string instruments

PROBLEM(S) IT OVERCOMES

no hands; no motor control of fingers or hands

FIELD TESTED

yes

Hogan Regional Center - Hathorne, MA

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

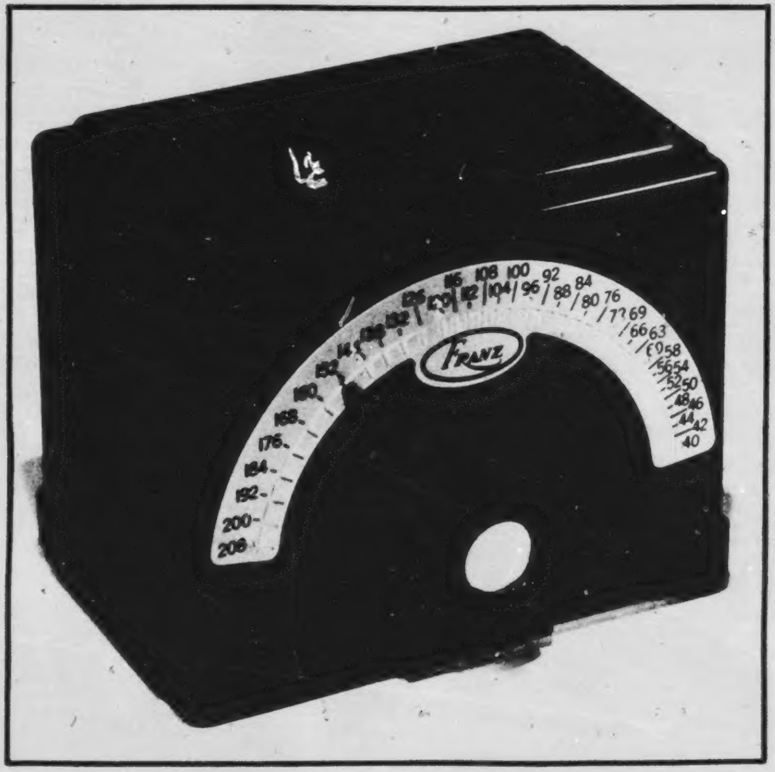
May be made at a minimal cost.

HOW IT WORKS

This pick is made of a plastic, curved plate which extends past the toes, curves up around the sides of the front part of the foot, and covers the sole of the front half of the foot without cramping any part. A 1-inch wide Velcro strap is riveted to the sides of the wide part of the pick which comes around the top of the foot. A second strap, between the big and second toes, adds security. The pick is applied to the dorsal surface of the foot and affixed with Velcro straps.
This design could also be adapted for use with a stump.

(Information based on Clinically Adapted Instruments for the Multiply Handicapped, Clark and Chadwick.)

FRANZ ELECTRIC METRONOME



Photograph courtesy of American Foundation for the Blind

FRANZ ELECTRIC METRONOME

DEVELOPER

CONTACT PERSON

Alex H. Townsend
American Foundation for the Blind
15 West 16th Street
New York, NY 10011
(212) 620-2169

WHERE IT IS USED

Arts
Recreation

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundation for the Blind
15 West 16th Street
New York, NY 10011

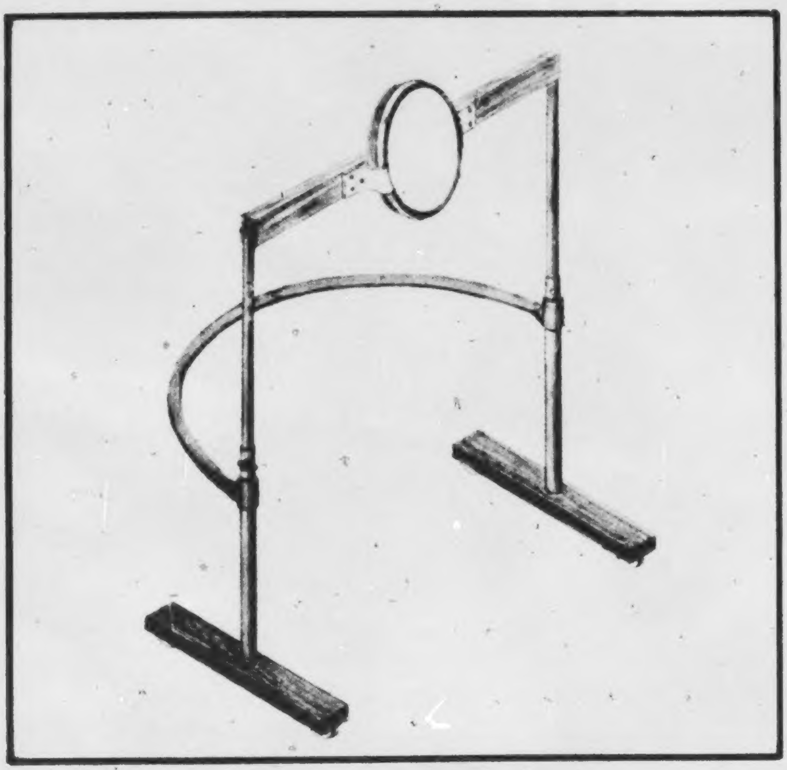
$38.00

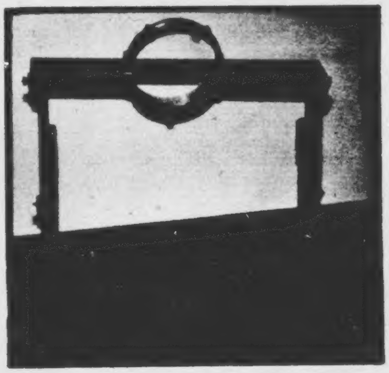
HOW IT WORKS

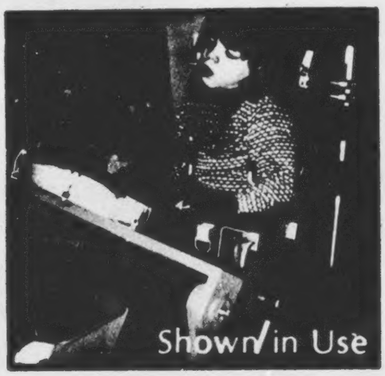
This is a standard electricametronome with a scale adapted for tactual reading. Its beats per minute run from 40 to 208. Double raised dots have been placed at 60, 72, 120 and 144 beats. Single raised dots are at 40, 96 and 208 beats. It is housed in a polished black plastic case.

(Information based on American Foundation for the Blind literature.)

HAND DRUM FRAME






Shown in Use

Photographs courtesy of
Modulations Co.

HAND DRUM FRAME

DEVELOPER

Cynthia Clark

CONTACT PERSON

Modulations Co.
9 Sawmill Drive
Westford, MA 01886
(617) 692-6590

WHERE IT IS USED

Play percussion instruments

PROBLEM(S) IT OVERCOMES

not able to reach drum from wheelchair

FIELD TESTED

yes

Hogan Regional Center - Hathorne, MA

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

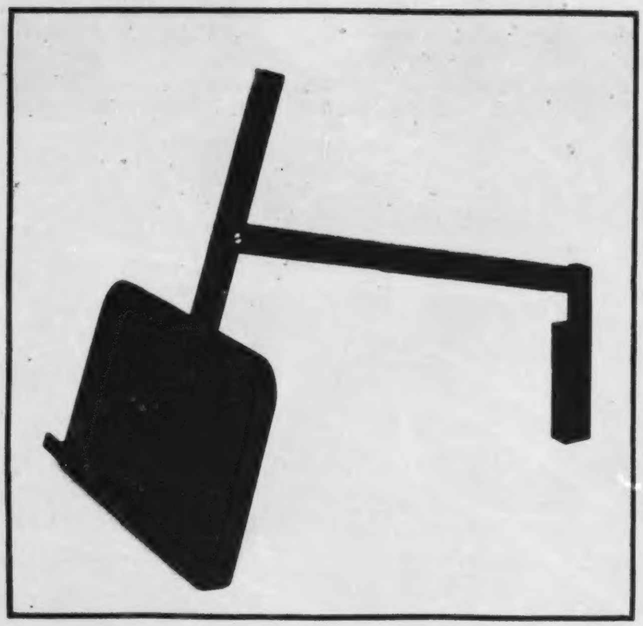
May be made at a minimal cost.

HOW IT WORKS

Sleeved pipe rodding or slotted adjustable wooden 2 by 4 legs are affixed to various lengths of 4 by 1 horizontal crosspieces; longer bars are appropriate for use over beds. Two Z-shaped clamps are mounted into slots on the crosspiece. The clamps slide and screw tightly to secure any standard 8-inch to 14-inch hand drum to the bar which is narrow enough to allow for proper resonation of the drum as it is played. The horizontal bar is attached to the legs with wing nuts so it can be tilted up to 90 degrees for even more precise positioning. A U-shaped stability brace at the base or halfway up the legs provides further grounding for the frame. For the pipe leg version, braking casters serve as feet; in the wooden model, 16-inch 2 by 4's give firm base support.
Another variation of this frame features two crescent clamps. With this variation, immediate expansion of the frame's width is possible.
This design can be completely constructed from acrylic with sleeved legs, strip heat and bent sheeting cut to a 4-inch width for the crosspiece and stability bar.

(Information based on Clinically Adapted Instruments for the Multiply Handicapped, Clark and Chadwick.)

MUSIC RACK FOR PARTIALLY VISIONED



Photographs courtesy of
American Printing House
for the Blind

MUSIC RACK FOR PARTIALLY VISIONED

DEVELOPER

Manufactured by:
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206
(502) 895-2405

WHERE IT IS USED

Arts
Recreation

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

information not available

FOR SALE

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

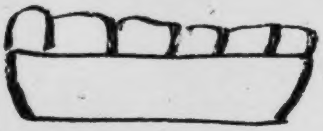
$31.00

HOW IT WORKS

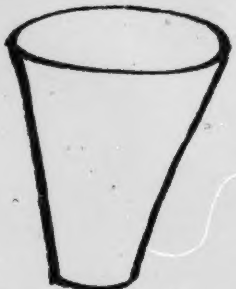
This device consists of a special wooden music rack, designed to fit any upright piano, for use by partially visioned people who can read ink-print music. The rack is so constructed that it is adjustable forward and backward, up and down, and it also tilts to the proper angle so that the music can be placed at the correct eye level and focal vision point of the player.

(Information based on American Printing House for the Blind literature.)

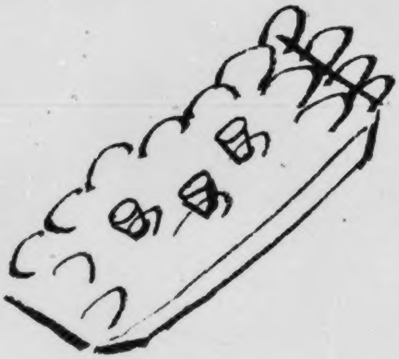
PAINT HOLDER



Plastic egg carton-upside down.



Plastic Taco Cup



Sketch by Shirle Hoover

PAINT HOLDER

DEVELOPER

Shirle Hoover, ART ATC
West Texas Rehabilitation Center
4601 Hartford
Abilene, TX 79605
(915) 692-1633

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Painting

PROBLEM(S) IT OVERCOMES

possible spillage

FIELD TESTED

not applicable

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

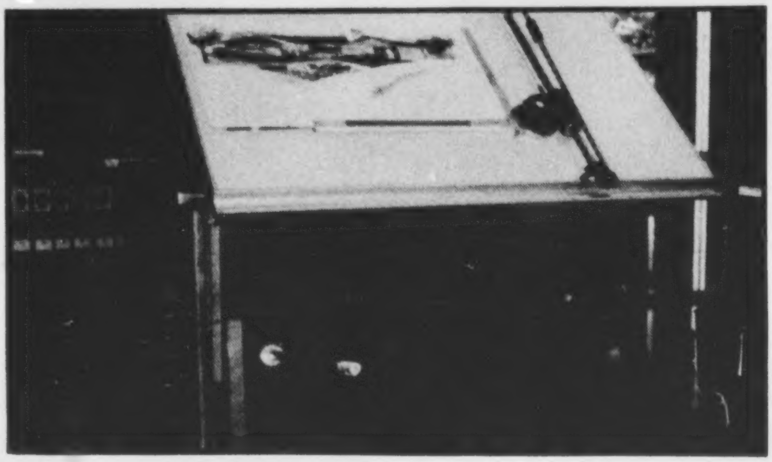
May be made at a minimal cost.

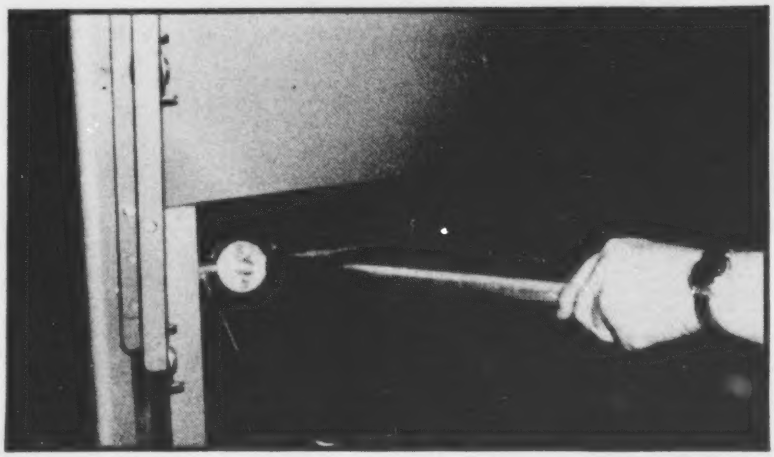
HOW IT WORKS

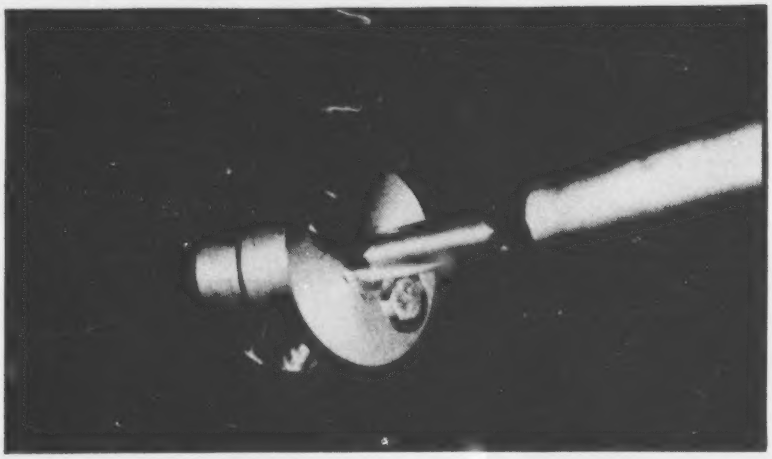
Openings are cut out of the top of an egg carton which is then taped to the work surface. Plastic cups with paint in them are placed in the carton openings. The cups usually come with lids so that paint can be stored in them.

(Information provided by Shirle Hoover.)

PARAPLEGIC DRAFTING TABLE MODIFICATIONS







Photographs courtesy of
David F. Law, Jr.

PARAPLEGIC DRAFTING TABLE MODIFICATIONS

DEVELOPER

David F. Law, Jr.
Woodrow Wilson Rehab. Ctr.
Rehabilitation Engin. Dept.
Fishersville, VA 22939
(703) 885-9724

CONTACT PERSON

David F. Law, Jr.
Woodrow Wilson Rehab. Ctr.
Rehab. Engin. Dept.
Fishersville, VA 22939
(703) 885-9724

WHERE IT IS USED

Drafting

PROBLEM(S) IT OVERCOMES

difficulty experienced by paraplegics who try to use commercial drafting table

FIELD TESTED

yes

Woodrow Wilson Rehabilitation Center

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

no

HOW IT WORKS

Clamp-on pin is attached to foot lever arm. The removable handle is kept under the table top and removed for use by wheelchair-bound individuals. By placing the handle over the clamp-on pin, the individual can raise and lower the drafting table using one-handed lever operation.

(Information provided by David F. Law, Jr.)

PICK GLOVE

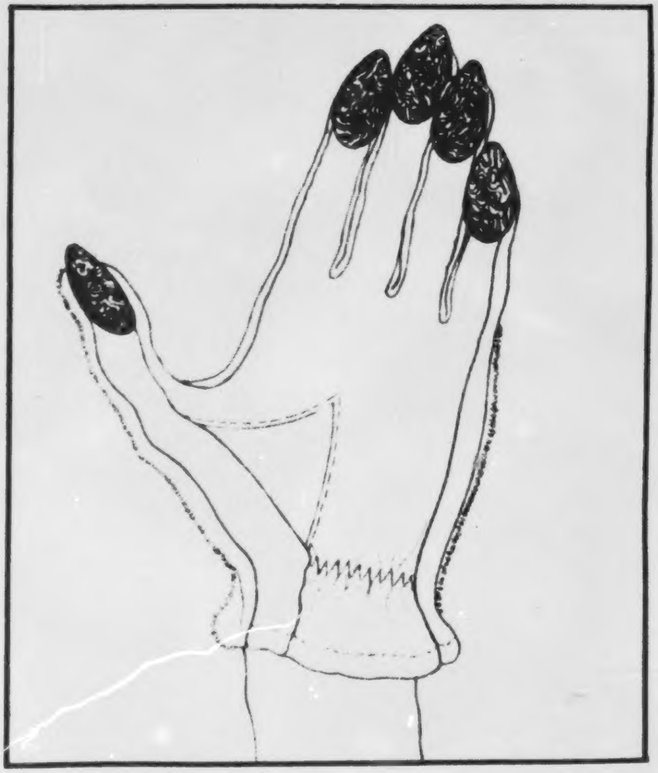


Illustration courtesy of
Modulations Co.

PICK GLOVE

DEVELOPER

Cynthia Clark

CONTACT PERSON

Modulations Co.
9 Sawmill Drive
Westford, MA 01886
(617) 692-6590

WHERE IT IS USED

Play string instruments

PROBLEM(S) IT OVERCOMES

limited finger grasp and motor control

FIELD TESTED

yes

Hogan Regional Center - Hathorne, MA

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

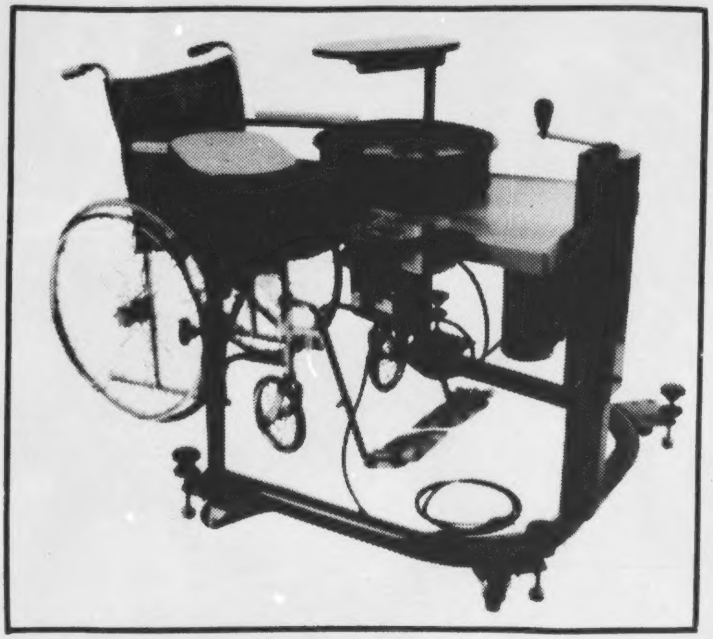
May be made at a minimal cost.

HOW IT WORKS

Individual plastic picks are glued onto the ends of each glove finger; a Velcro strap at the wrist adjusts sizing; an open thumb area allows for easy dressing and undressing of the glove. When wearing the Pick Glove the user can pluck and or strum standard stringed instruments by simple movement of the fingers in a clawing fashion, as a unit or with each or any finger separately. A variation on the design would be to glue picks on the dorsal surface of the fingers of the glove for the purpose of getting movement via the strumming of the arm in a supine position. Color-coded picks add another degree of versatility.

(Information based on Clinically Adapted Instruments for the Multiply Handicapped, Clark and Chadwick.)

POTTER'S WHEEL



Photograph courtesy of AMACO

POTTER'S WHEEL

DEVELOPER

Robert Brent Corporation
Division of American Art
Clay Co., Inc.

CONTACT PERSON

Edward J. Walsh
American Art Clay Co, Inc
4717 W. 16th Street
Indianapolis, IN 46222
(317) 244-6871

WHERE IT IS USED

Art

PROBLEM(S) IT OVERCOMES

restriction to a wheelchair; eliminates need for two wheels as both a handicapped and a nonhandicapped person can use it

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

American Art Clay Co., Inc.
4717 W. 16th Street
Indianapolis, IN 46222

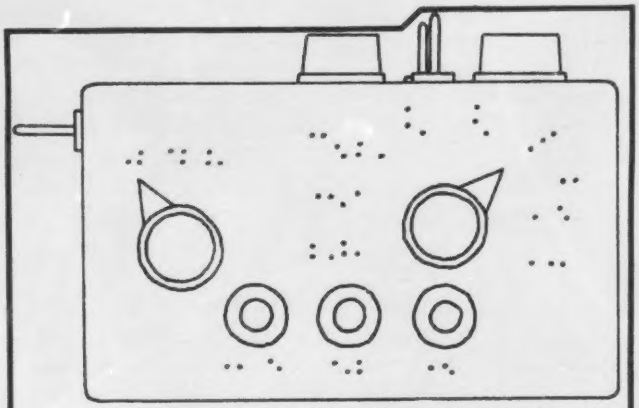
$749.00

HOW IT WORKS

Potter's wheel no. 16 has a crank at the back of the wheel which adjusts the throwing head height from 19½" to 34" from the floor. The wheel fits through a 36" wide door opening and can be used from a standing or sitting position. It rolls on four hard rubber swivel casters and four screw down feet raise the casters off the floor. The hard rubber feet can be used to level the wheel on uneven surfaces. Plastic lock knobs can be tightened against the caster plates to hold the wheel in place during use, this operation can be done using one hand. The splash pan is in two pieces for removing and cleaning. The 12" diameter, 3/4" bore head has concentric circles for centering and two bat pins. The hand lever/foot pedal, (which can be put on the floor or clamped to the tray at the side of the table), will operate the wheel from 0 to 200 rpms. It can be used by a left or right handed person as it can go clockwise or counter clockwise. There is a worktable behind the splash pan and two adjustable table tops for arm rests, centering, tools or rests for throwing while standing.

(Information based on AMACO catalog no. 80. October 1, 1979.)

PROFESSIONAL AUD-A-LEVEL



T-10P PROFESSIONAL AUD-A-LEVEL
2 Connecting cables are supplied.

Illustration courtesy of
Science for the Blind
Products

PROFESSIONAL AUD-A-LEVEL

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind
Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

Professional recording or broadcasting

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

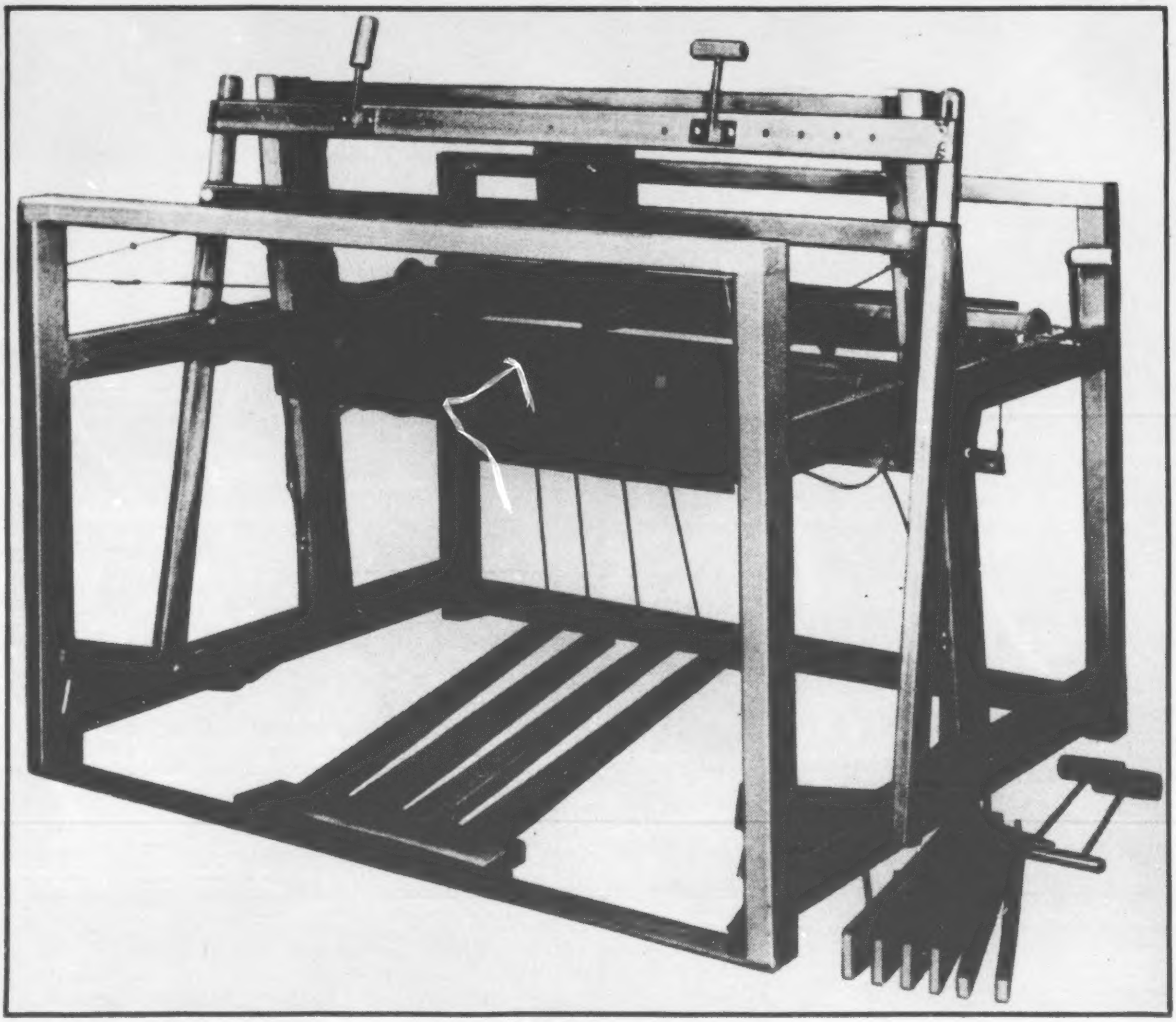
$235.00

HOW IT WORKS

The Professional Aud-A-Level enables operator to monitor audio level during recording or broadcasting. Accuracy is about equivalent to visual meters on most recorders. The Aud-A-Level is connected to the output jack of the recorder or if the recorder does not have a monitor jack active in record position, an internal connection must be made by a technician. This Professional Aud-A-Level is AC powered, with a switch which can be set for zero VU with positions for -20, -15, -10, -5, -2, 0, +2 and +3. It is also equipped with a selector switch which enables it to operate properly at +4 and +8 VU. There is a built-in stereo switch as well.

(Information based on Science for the Blind literature.)

REHABILITATION LOOM AND ACCESSORIES



Photograph courtesy of Bailey Manufacturing Co.

REHABILITATION LOOM AND ACCESSORIES

DEVELOPER

Bailey Manufacturing Co.
118 Lee Street
Lodi, OH 44254
(216) 948-1080

CONTACT PERSON

Adelle
Bailey Manufacturing Co.
118 Lee Street
Lodi, OH 44254
(216) 948-1080

WHERE IT IS USED

Weaving

PROBLEM(S) IT OVERCOMES

unable to use conventional loom

FIELD TESTED

yes

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Bailey Manufacturing Co.
118 Lee St.
Lodi, OH 44254

$1120.00

HOW IT WORKS

A versatile four-harness, forty-inch rigid Jack Loom designed for the widest possible combination of uses to handle a user's physical characteristics. Designed so that persons sitting in wheelchairs may use the loom, including those with arm cranes.

(Information based on Bailey Catalog No. 0583 April 1, 1979; information also provided by Larry R. Strimple, Bailey).

RUG HOOKING HOLDER FOR THE WHEELCHAIR

RUG HOOKING HOLDER FOR THE WHEELCHAIR

DEVELOPER

Cindy Hrudka
Northern Wisconsin Center
for the Developmentally
Disabled
Box 340
Chippewa Falls, WI 54729
(715) 723-5542

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Art
Recreation

PROBLEM(S) IT OVERCOMES

difficulty keeping work far enough away from one's legs

HOW IT WORKS

The burlap is attached to the wooden frame. The wooden frame is deep to allow enough room to complete the punch needle motion. The frame rests on a tray over the arms of the wheelchair.

(Information based on personal interview.)

FIELD TESTED

yes

REGULATORY APPROVAL

information not available

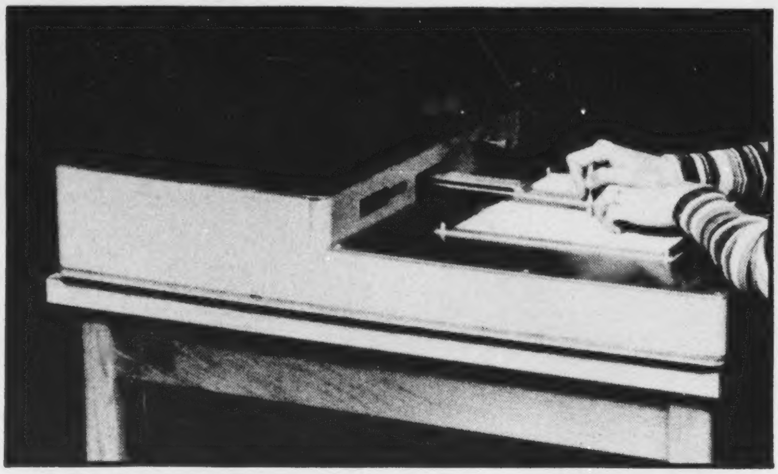
WARRANTY PROVIDED

information not available

FOR SALE

May be made at a minimal cost.

SENSORY QUILL



Photograph courtesy of
D. Reginald Traylor

SENSORY QUILL

DEVELOPER

Traylor Enterprises, Inc.
830 N.E. Loop 410
Suite 505
San Antonio, TX 78209
(512) 828-0203

CONTACT PERSON

D. Reginald Traylor
or M.L. Jones
Traylor Enterprises, Inc.
830 N.E. Loop 410
Suite 505
San Antonio, TX 78209
(512) 828-0203

WHERE IT IS USED

- Arts
- Construction
- Drawing
- Information Processing
- Writing

PROBLEM(S) IT OVERCOMES

inability of a visually impaired person to see drawings, graphs, plans, maps, etc.

FIELD TESTED

yes

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

yes

FOR SALE

Traylor Enterprises, Inc.
830 N.E. Loop 410
Suite 505
San Antonio, TX 78209

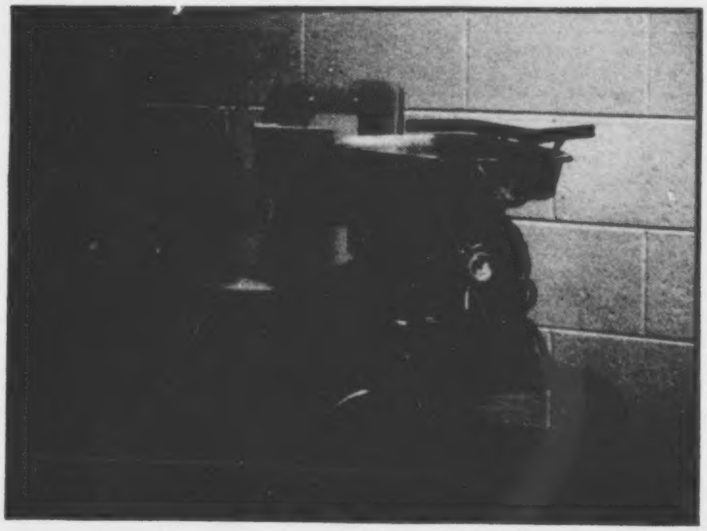
Institutional Model - $795
Personal Model - $425

HOW IT WORKS

The user moves a stylus across the writing and drawing area. Wherever the stylus touches the paper or plastic, a raised image occurs. Script, graphics, drawings and maps can be produced quickly and easily in raised form, with no inversion necessary for tactual inspection. Whatever a sighted person sees in the nature of drawings, graphs, plans, maps, etc. can now be tactually "seen" by the visually handicapped. Importantly, the visually handicapped can generate their own raised line drawings, better communicating with the nonhandicapped.

(Information based on Traylor Enterprises, Inc. literature.)

SIT-DOWN POTTER'S WHEEL STAND



Photographs courtesy of
Richard Jensen

83

SIT-DOWN POTTER'S WHEEL STAND

DEVELOPER

Richard Jensen
122 Paoli Street
Verona, WI 53593
(608) 845-7904

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Art

PROBLEM(S) IT OVERCOMES

difficulty standing or sitting at a conventional potter's wheel

FIELD TESTED

yes

Madison LaFollette High School -
Madison, WI

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

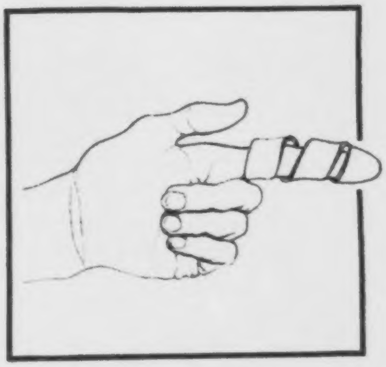
no

HOW IT WORKS

This wheel stand is a combination school desk and standard American Art and Clay Co. (AMACO) potter's wheel stand. The potter's wheel seat was removed and the legs of the wheel stand extended. A back style chair was attached to the stand to provide added back support for people with difficulty in upper and lower body control.
The standard arm desk in this style of chair can also be used to add additional body support. More support could be provided by using a car type seat and shoulder belt. The wheel itself can be removed from the stand and used in a standard manner.

(Information provided by Richard Jensen.)

SPIRAL FINGER PICK



Photographs courtesy of
Modulations Co.

SPIRAL FINGER PICK

DEVELOPER

Kathleen Massa

CONTACT PERSON

Modulations Co.
9 Sawmill Drive
Westford, MA 01886
(617) 692-6590

WHERE IT IS USED

Play string instruments

PROBLEM(S) IT OVERCOMES

limited finger grasp and muscle support

FIELD TESTED

yes

Hogan Regional Center - Hathorne, MA

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

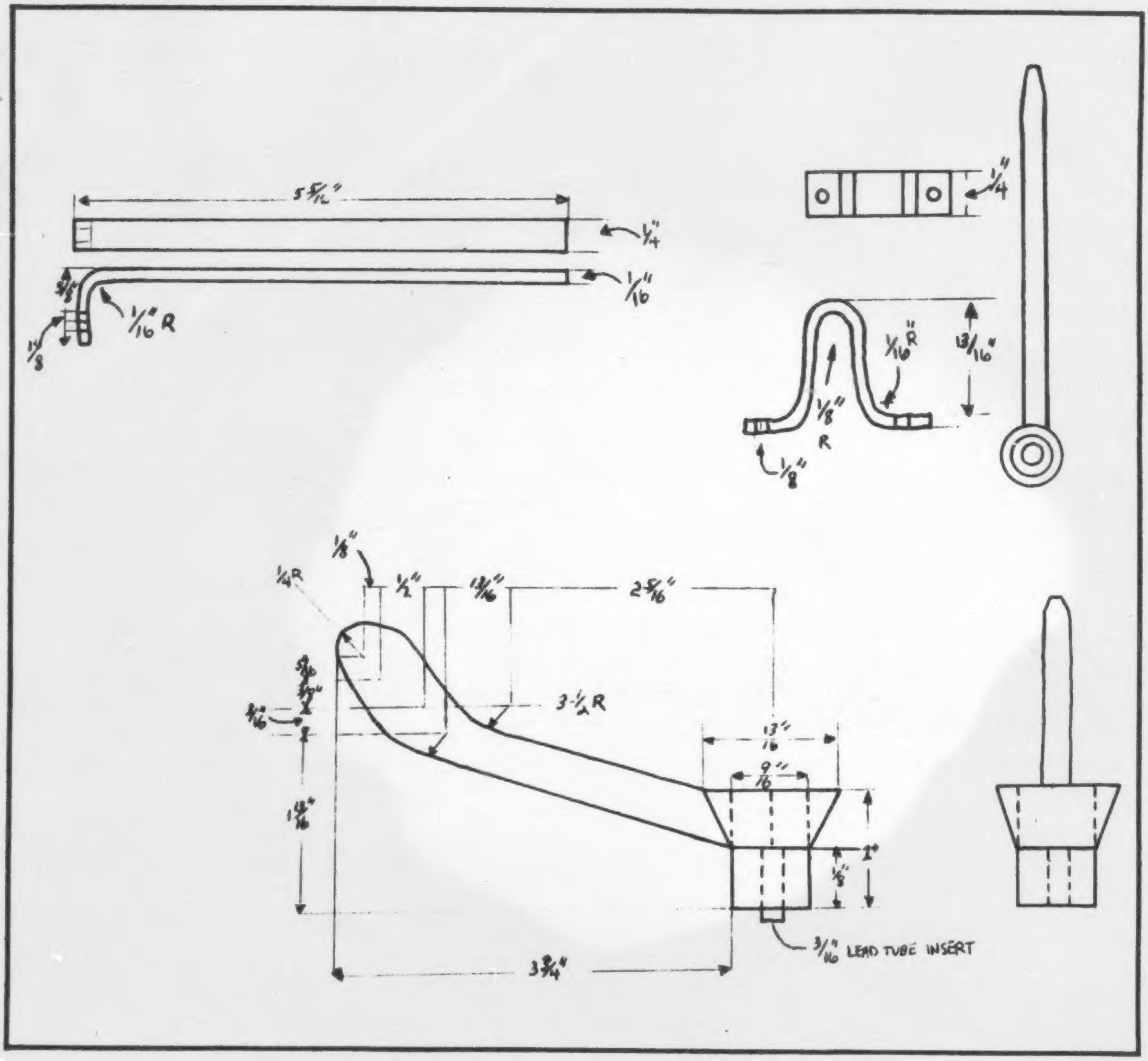
HOW IT WORKS

This pick curls around a finger spiral fashion for ease in putting on and taking off. Made from Orthoplast or moldable plastic, it can be custom fitted to even a contracted finger. The pick can be turned so its strumming end is either on the dorsal, ventral or lateral surface of the finger and several can be used together for work with different fingers in the same activity. A raking pattern with the pick in contact with the strings of standard instruments results in a strum. The Spiral Finger Pick can be used in any manner a standard pick is used. It could also be fashioned for a toe, or curled around the end of mouth or head sticks.

This pick should not be used with people who are spastic because it can increase spasticity.

(Information based on Clinically Adapted Instruments for the Multiply Handicapped, Clark and Chadwick.)

TAPE DECK MODIFICATION


5 5/16"
1/4"
1/16"
3/8"
1/16" R
1/8
1/4
1/16" R
13/16"
1/8"
R
1/8"
1/8"
1/4R
1/2"
13/16"
2-5/16"
5/16
1/4"
3/16"
3-1/2 R
13/16"
9/16"
1 13/16"
1"
5/8"
3/16" LEAD TUBE INSERT
3 3/4"

(not drawn to scale)

Diagram courtesy of Bob
Warren, redrawn by Terri
Bleck, WVSC

TAPE DECK MODIFICATION

DEVELOPER

Bob Warren J.A.
United Cerebral Palsy of Akron
318 Water Street
Akron, OH 44308
(216) 376-6041

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Arts
Education
Listening

PROBLEM(S) IT OVERCOMES

inability to effectively use a tape cassette recorder with speed or consistency when recording or playing back information due to a small record button, and a mode switch utilizing rotary motion

FIELD TESTED

yes

United Cerebral Palsy - Akron, OH

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

no

HOW IT WORKS

The device was designed to increase ease of use of function switches of the cassette deck. The mode switch was redesigned to make selection easier by increasing the size and shape of the switch and decreasing the amount of concentrated force required to turn it. It was made of commerically available stock that was modified for specific results. The record button was modified by a spring steel push bar eliminating precise finger dexterity and persistent control necessary to push the button and turn the selection knob at the same time which was required for record mode.

(Information provided by Bob Warren, UCP.)

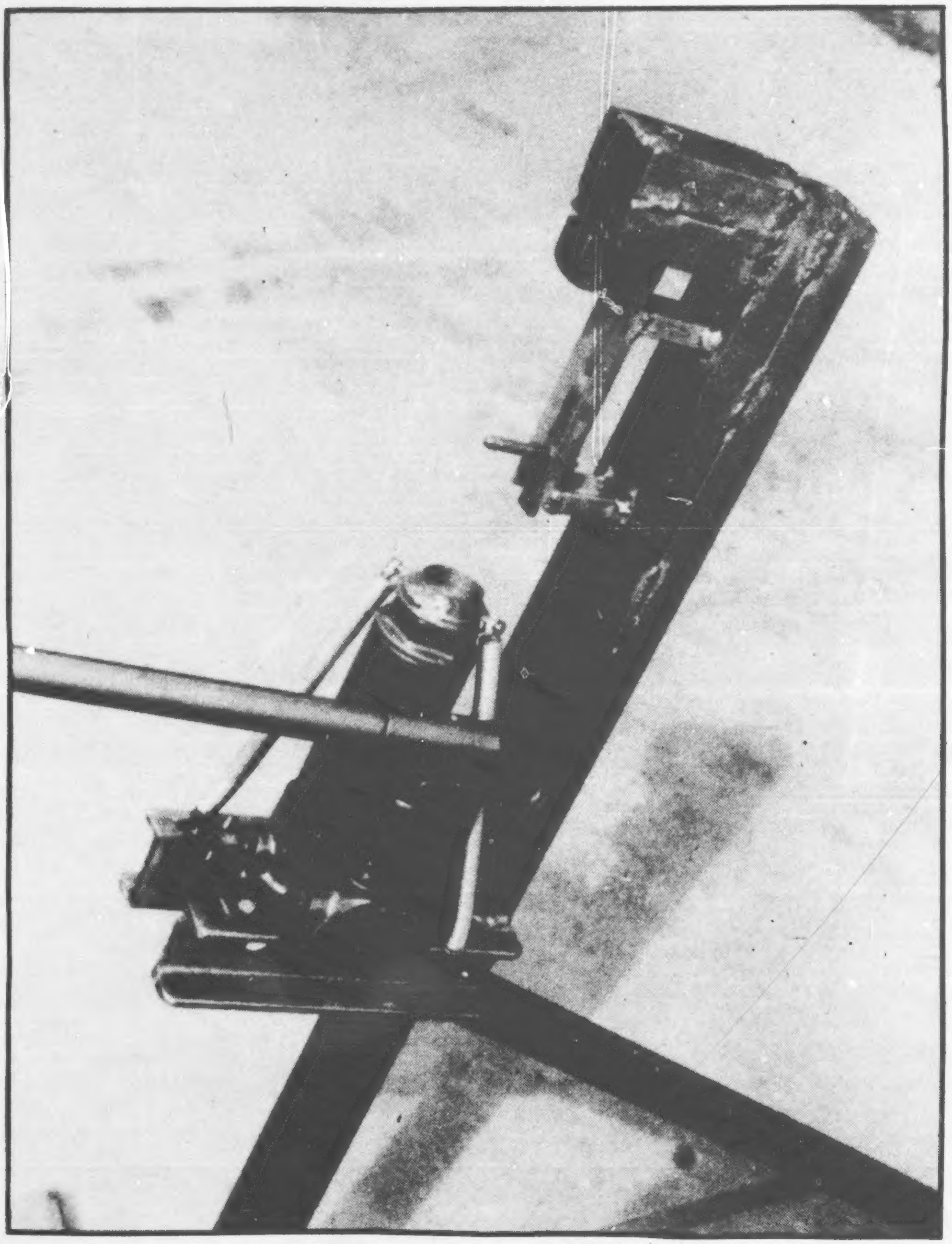
ASSEMBLY

Crimping Parts in Position 88

Grasp Pad 90

Press Fitting Parts Together 92

CRIMPING PARTS IN POSITION



Photograph courtesy of California Department of Rehabilitation

CRIMPING PARTS IN POSITION

DEVELOPER

Charles Eckles
Independent Contract
Consultant
(213) 360-4180

CONTACT PERSON

California Department of
Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Assembly of swimming pool equipment

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

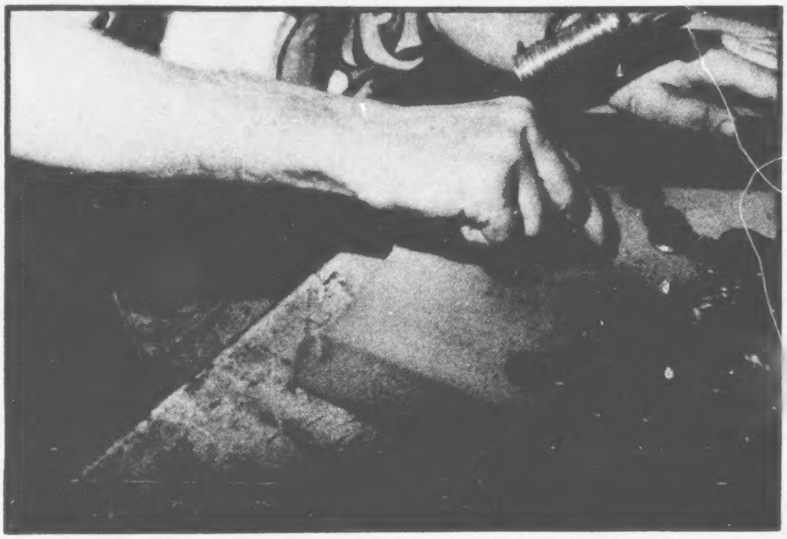
Price dependent on available materials.

HOW IT WORKS

This device simplifies some of the operations in the assembling of such swimming pool equipment as pool skimmers and leaf rakes. Involved here is the insertion and crimping of metal plugs in the ends of the aluminum tubing. For this job, an ordinary 2½ ton automotive hydraulic jack is bolted onto the frame of a sturdy floor stand. The tubing with the plug inserted, is placed between the top of the jack and the top die, which has a pin to hold the proper alignment. When the jack is operated, it forces the tubing up and crimps it in place.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

GRASP PAD



Photograph courtesy of John H. Leslie, Jr.

GRASP PAD

DEVELOPER

Rehabilitation Engin. Ctr.
2021 North Old Manor
Wichita, KS 67208
(316) 688-1888

CONTACT PERSON

Leonard Anderson
Rehabilitation Engin. Ctr.
2021 North Old Manor
Wichita, KS 67208
(316) 688-1888

WHERE IT IS USED

Assembly
Benchwork
Packaging

PROBLEM(S) IT OVERCOMES

lack of grasp capability

FIELD TESTED

yes

Center Industries Corporation-Wichita, KS

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

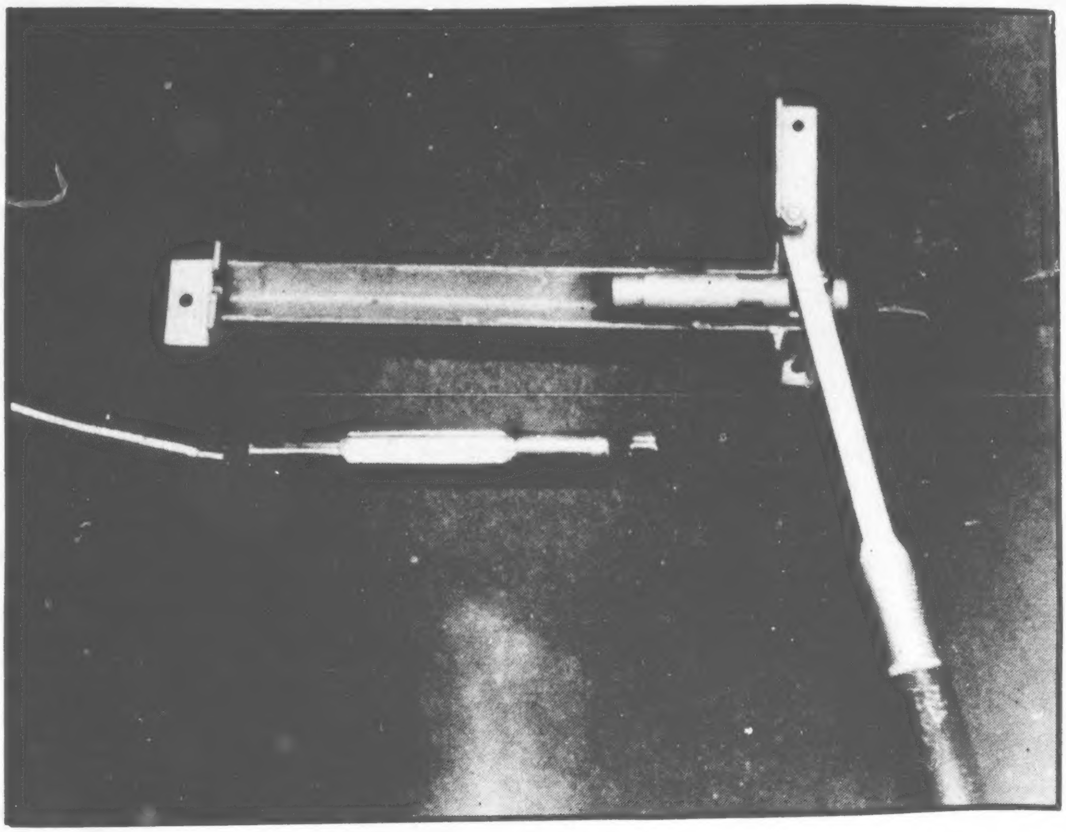
May be made at a minimal cost.

HOW IT WORKS

A grasp pad is a piece of foam rubber of the size and resiliency desired placed on the normal assembly surface so that parts may be distributed on the pad prior to the selection for assembly. The pad may be used for holding parts or tools. This device allows the user to squeeze the foam rubber material and therefore, grasp small parts. It gives the user discrimination ability in selection of parts in jumbled piles.
Based upon field testing, the use of the grasp pad appears to improve performance in almost all cases. The increased performance was greater for items most difficult to be picked up. Further, and even more remarkable, the most severely handicapped persons showed the greatest increase in performance.

(Information provided by John H. Leslie, Jr., Rehabilitation Engineering Center.)

PRESS FITTING PARTS TOGETHER



Photograph courtesy of California Department of Rehabilitation

PRESS FITTING PARTS TOGETHER

DEVELOPER

Charles Eckles
Independent Contract Consultant
(213) 360-4180

CONTACT PERSON

California Department of Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Assembly of swimming pool equipment

PROBLEM(S) IT OVERCOMES

lack of hand strength

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

This device is designed to simplify the fitting of two metal caps on the ends of swimming pool thermometers. An inexpensive hand-press and holding jig is used. The thermometer and caps are positioned in the press with the thermocouple tube extending through a slotted cutout in the fixed end of the press. A light, uniform pressure on the press handle forces both end caps on the thermometer body at the same time.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

ASSESSMENT

Scanning Aid 96

SCANNING AID

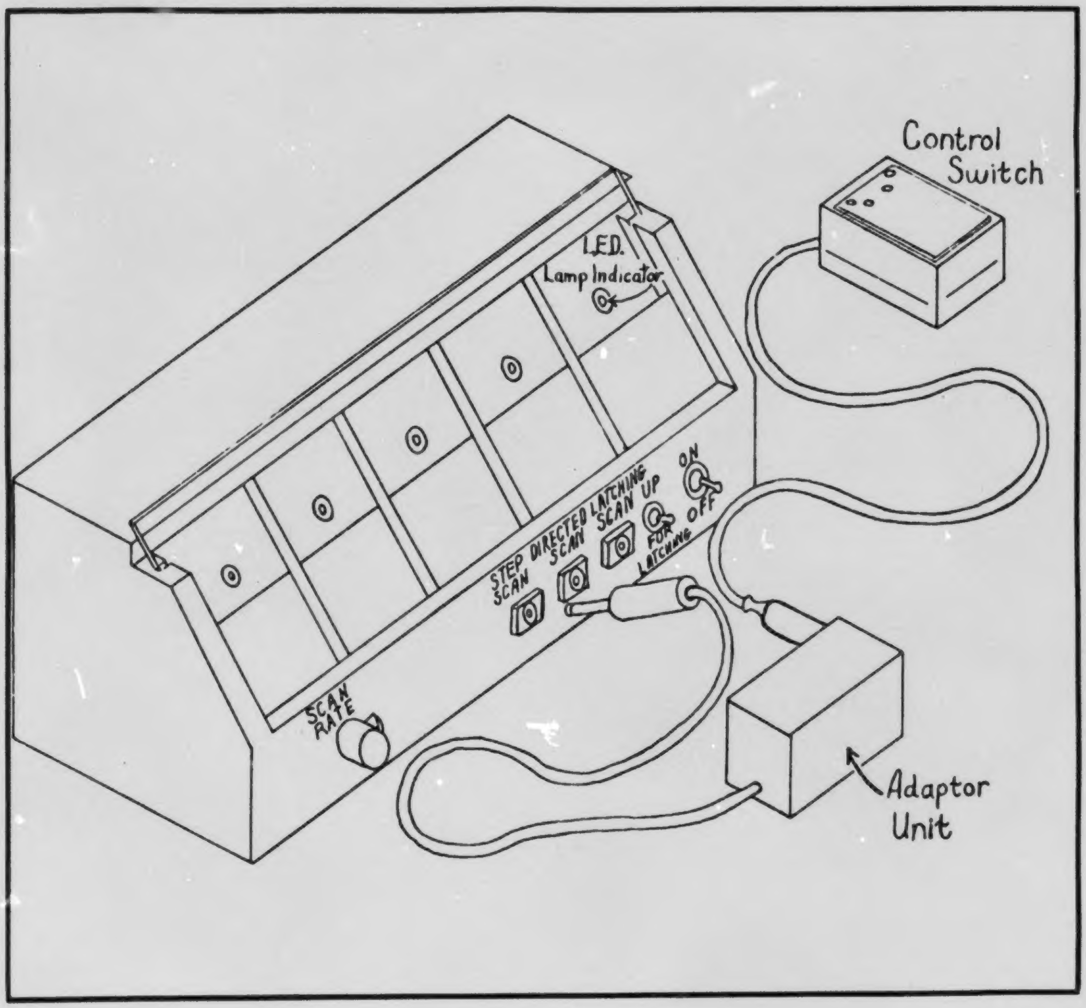

Control Switch
L.E.D. Lamp Indicator
STEP SCAN
DIRECTED SCAN
LATCHING SCAN UP
FOR LATCHING
ON
OFF
SCAN RATE
Adaptor Unit

Illustration courtesy of
Carol Schaeffler

SCANNING AID

DEVELOPER

Carol Schaeffler
John Mauro
United Cerebral Palsy
622 Foster Avenue
Brooklyn, NY 11230
(212) 859-8850

CONTACT PERSON

Carol Schaeffler
United Cerebral Palsy
622 Foster Avenue
Brooklyn, NY 11230
(212) 859-8850

WHERE IT IS USED

Assessment
On the job

PROBLEM(S) IT OVERCOMES

difficulty assessing how an individual can best operate electronic equipment prior to the introduction of major commercially available systems

FIELD TESTED

yes

in process at United Cerebral Palsy

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

no

HOW IT WORKS

This device was designed to help evaluate an individual's optimal means to operate an electronic scanning aid.
To operate a scanning device in one of three possible modes, an individual activates a control switch.
A simple adaptor unit provides access to many commercially available inputs. The adaptor unit gives the individual the opportunity to use and compare a wide selection of control switches. The adaptor unit is interfaced with a receptacle for a particular scan mode on the scanning aid. The aid scans in 3 modes: step scan, directed scan, or latching scan. In "step" scanning, the indicator moves through one item on the display each time the input switch is activated. In directed scanning, the indicator moves through the display items while the input is being activated. In the latching scan mode, the indicator moves automatically through the display and stops when the input is activated by the user.
The scan speed can be adjusted to meet individual needs. The aid scans through five display panels in a linear fashion. Each panel has an LED indicator lamp.
A Plexiglas cover can be removed to change the items in each display panel.

(Information provided by Carol Schaeffler.)

AUTOMOBILE REPAIR

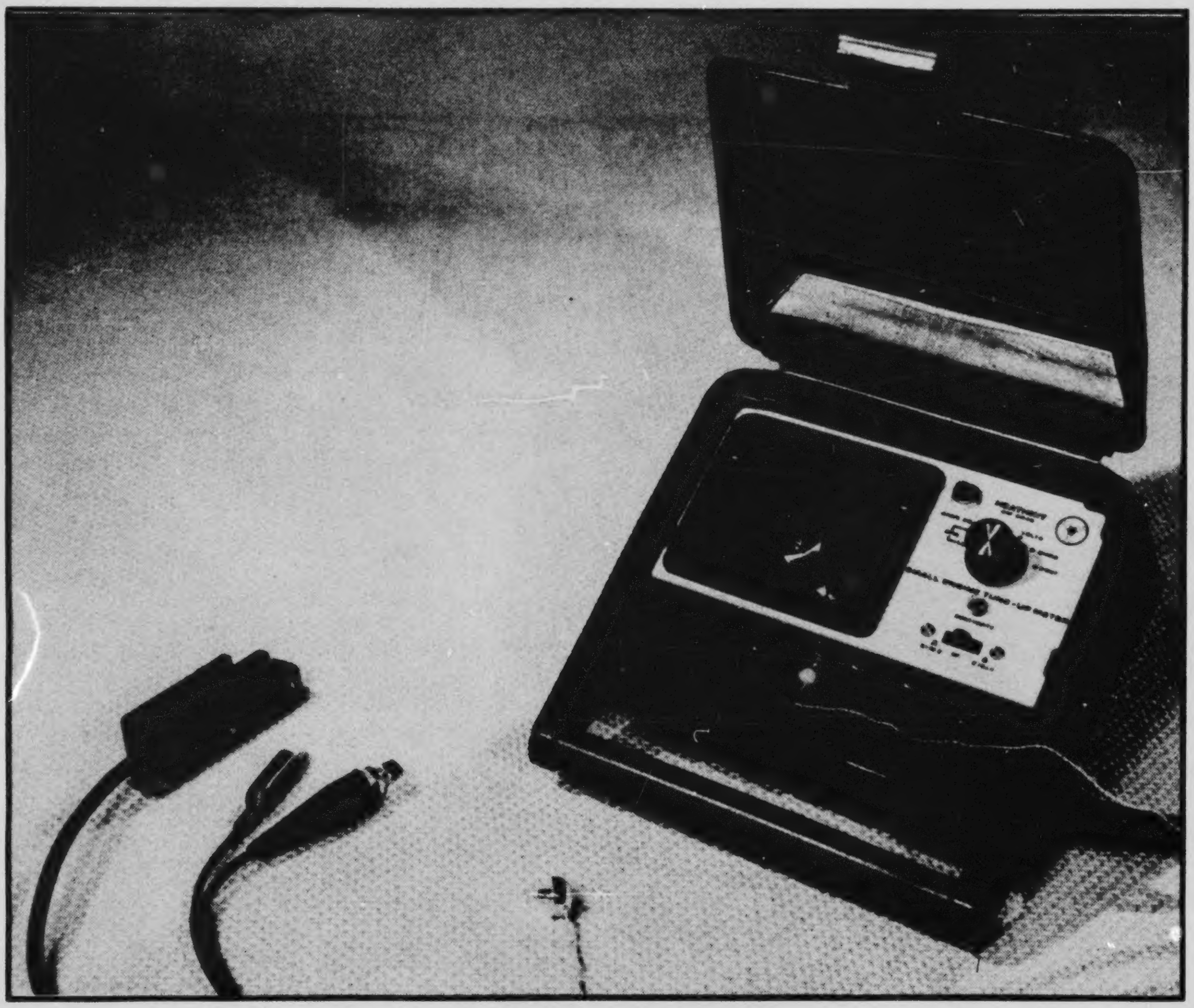
Engine Tuneup Meter with Auditory Output 100

Modified Gauges 102

Tire Gauge 104

Torque Wrenches 106

ENGINE TUNEUP METER WITH AUDITORY OUTPUT



Photograph courtesy of J.C.
Swail

ENGINE TUNEUP METER WITH AUDITORY OUTPUT

DEVELOPER

J.C. Swail
National Research Council
M-50
Dee R182 Montreal Road
Ottawa Ontario
Canada
K1A 0R8

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Automobile Repair

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

Canadian National Institute for the Blind-
Toronto, Canada

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

no

HOW IT WORKS

This product is a modification of Heathkit CM2045. The visual meter was replaced with an auditory and tactile readout.

(Information provided by J.C. Swail, N.R.C.)

MODIFIED GAUGES

Photograph not available

MODIFIED GAUGES

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind
 Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

Automotive Repair

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

HOW IT WORKS

These fuel, vacuum and pressure gauges can be used in automotive or auto air-conditioning service. They have all been modified for the blind technician. Gauges of your choice will be adapted if possible - consult Science for the Blind Products before choosing.

(Information based on Science for the Blind literature.)

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TIRE GAUGE

Photograph not available

TIRE GAUGE

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind
Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

Checking tire pressure

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

$7.50

HOW IT WORKS

A standard gauge has been modified with notches on the metal rod that projects from the end of the gauge when pressure is applied from the tire valve.

(Information based on Science for the Blind literature.)

TORQUE WRENCHES

Photograph not available

TORQUE WRENCHES

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind
Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

Automotive Repair

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

HOW IT WORKS

These wrenches feature micrometer-type adjustment to any torque value within their range. Torque is indicated mechanically by an audible sound or "click" and a sudden release, followed by several degrees of free movement. Ruggedly built, they are also light in weight and well balanced. Compact heads permit use in narrow working quarters.

(Information based on Science for the Blind literature.)

BENCHWORK

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ALIGNING A HANDSAW

Photograph courtesy of R.A. Weisgerber

ALIGNING A HANDSAW

DEVELOPER

R.A. Weisgerber
American Institutes for Research in the Behavioral Sciences
1791 Arastradero Road
Palo Alto, CA 94302
(415) 493-3550

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Benchwork

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

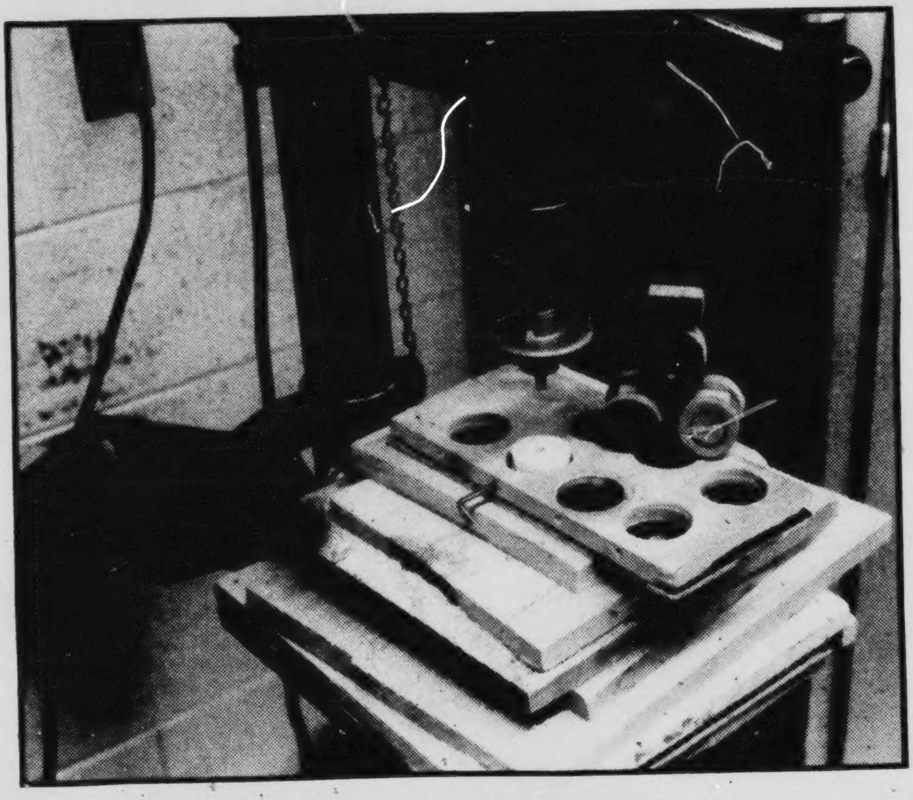
May be made at a minimal cost.

HOW IT WORKS

A carpenter's square set atop of the wood to be cut is used to position the saw and assure a straight cut.

(Information provided by R.A. Weisgerber.)

DRILL JIG



DRILL JIG

DEVELOPER

John Wenstadt
Northern Wisconsin Center for the Developmentally Disabled
Box 340
Chippewa Falls, WI 54729
(715) 723-5542

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Benchwork

PROBLEM(S) IT OVERCOMES

limited control of arm and hand movement

HOW IT WORKS

The round wood piece (wheel) fits in the jig, a round area of a larger size. The wood is secured by an L-screw. The drill bit is lined up with the center of the wheel and a hole drilled. It is possible to keep hands a safe distance away from the drill.

(Information based on personal interview.)

FIELD TESTED

yes

REGULATORY APPROVAL

not applicable

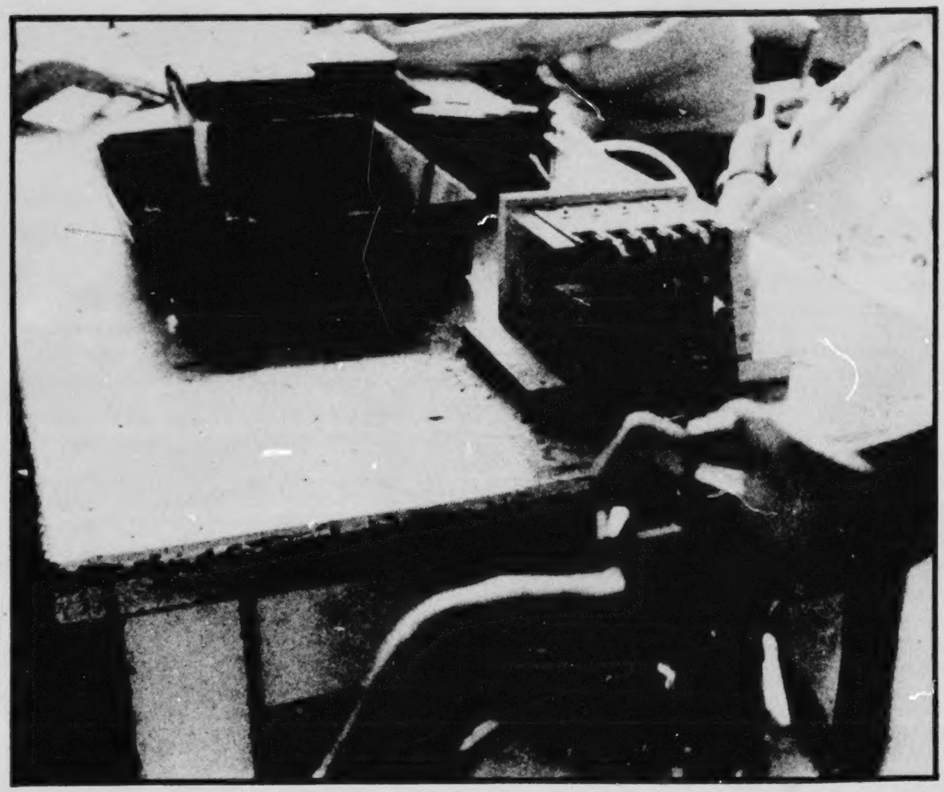
WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

FIXTURES FOR HOLDING TAPE CARTRIDGES



Photograph courtesy of
Mark Stephenson

FIXTURES FOR HOLDING TAPE CARTRIDGES

DEVELOPER

Mark Stephenson
Occupational Services, Inc.
17 Redwood Street
Chambersburg, PA 17201

CONTACT PERSON

WHERE IT IS USED

Benchwork

PROBLEM(S) IT OVERCOMES

slow rate of production

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

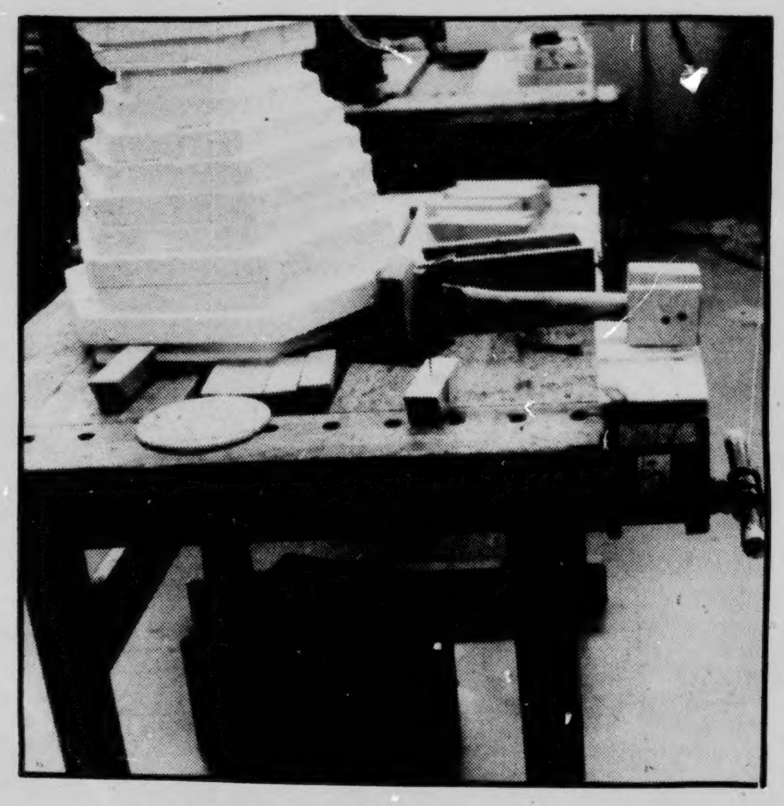
HOW IT WORKS

This fixture is designed to hold microfilm tape cartridges so that they may be stripped of their microfilm. In an assembly line operation, leaders are removed from tape cartridges. Cartridges are inserted into fixtures. Tape is pulled from 5-10 cartridges, tail leaders are cut and cartridges removed from fixture.

Materials: 3/4" pine shelving board
10 d common nails

Using the cartridges as a guide, make a wooden box that is open on top. Allow just enough room in the front of the box for the tape to exit through the opening in the cartridge.

(Information provided by Mark Stephenson.)



HAMMER AIMER

DEVELOPER

John Wenstadt
Northern Wisconsin Center for the Developmentally Disabled
Box 340
Chippewa Falls, WI 54729
(715) 723-5542

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Benchwork

PROBLEM(S) IT OVERCOMES

limited hand or arm control

FIELD TESTED

yes

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

After the nail has been placed, someone with limited nailing accuracy can finish the process. The hammer pivots at the end of its handle on a rod going through it. The rod goes into two blocks of wood located on either side of the handle.

(Information based on personal interview.)

A HOLDING FIXTURE FOR DEBURRING DRILLED HOLES IN BRASS BLOCKS

Photograph courtesy of Albert
E. Swarts, P.E.

A HOLDING FIXTURE FOR DEBURRING DRILLED HOLES IN BRASS BLOCKS

DEVELOPER

Albert E. Swarts, P.E.
Richard L. Biddy, Dir.
Vocational Industrial Center - (Houston)
Donald R. Smith, PH.D.
Texas A & M University -
(College Station)

CONTACT PERSON

Albert E. Swarts, P.E.
Vocational Industrial Ctr
The Institute for Rehabilitation and Research
2809 Main Street
Houston, TX 77002
(713) 797-1440

WHERE IT IS USED

Assembly
Benchwork

PROBLEM(S) IT OVERCOMES

lower extremity weakness

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

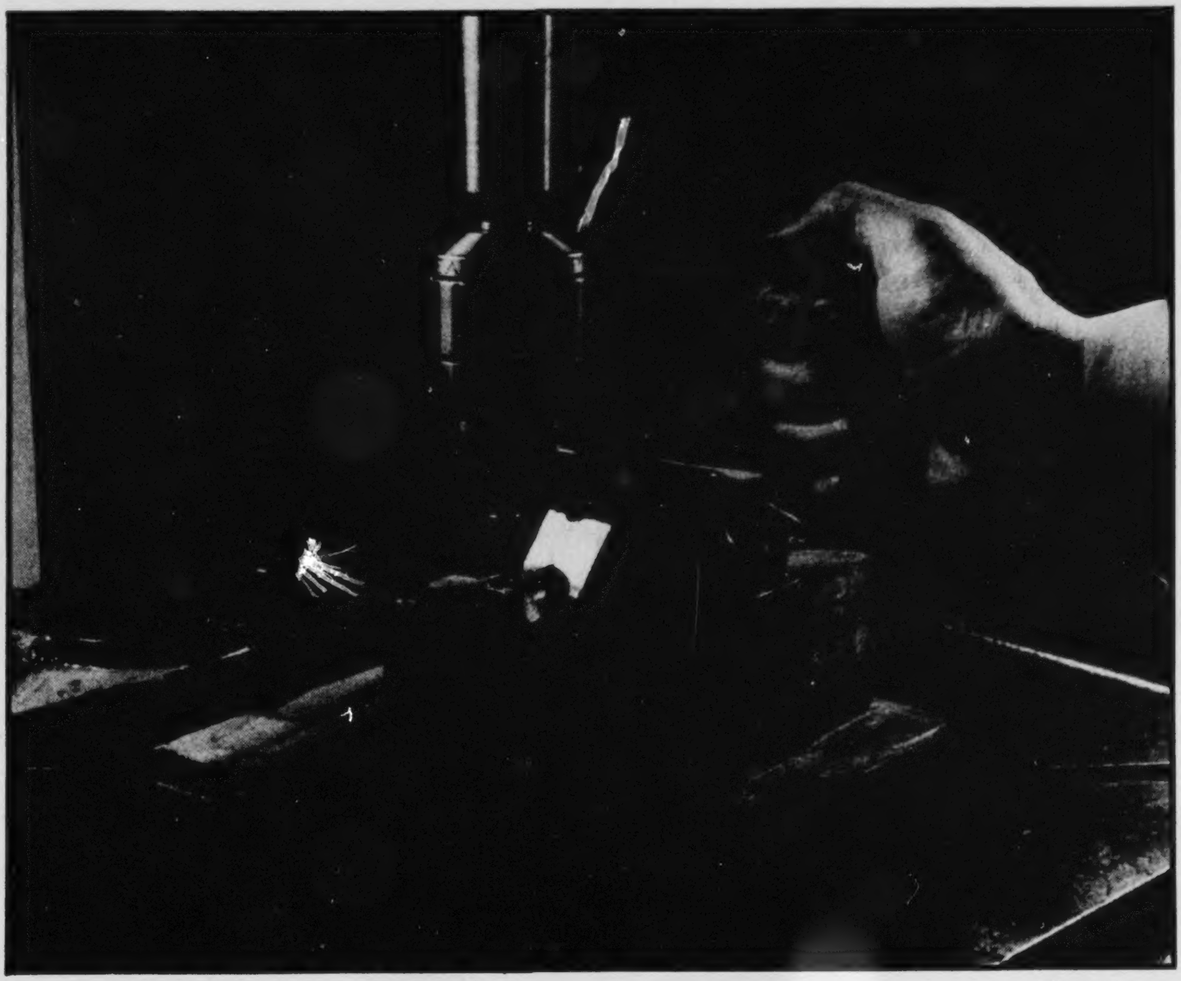
May be made at a minimal cost.

HOW IT WORKS

The holding fixture is designed to accommodate 7 blocks at a time in a proper orientation for deburring. It deburres 3 surfaces of the block by using a quick-release mechanism that will allow the blocks to be oriented quickly after a surface has been completed. A clamping device holds the blocks in a fixed position when deburring the holes in the first surface. With a movement of the clamp, the 7 blocks will fall into position for the deburring of the holes in the second surface. To deburr holes in the third surface, the user must handle each of the blocks manually. When deburring of the holes in the third surface is complete, tipping the holding fixture over a drop chute empties the clip.
The clip and the clamping mechanism are mounted on a wooden base that may be moved by the user while deburring takes place. In this manner, the users' hands are well removed from the deburring tool and the hazard of hand injury is minimized.

(Information based on Examples of Jig and Fixture Design as Applied to the Severely Disabled Functioning in a Sheltered Workshop, Biddy, Smith and Swarts.)

A HOLDING FIXTURE FOR DEBURRING HOLES IN BOLT HEADS



Photograph courtesy of Albert
E. Swarts, P.E.

A HOLDING FIXTURE FOR DEBURRING HOLES IN BOLT HEADS

DEVELOPER

Albert E. Swarts, P.E.
Richard L. Biddy, Dir.
Vocational Industrial Center - (Houston)
Donald R. Smith, PH.D.
Texas A & M University - (College Station)

CONTACT PERSON

Albert E. Swarts, P.E.
Vocational Industrial Ctr
Institute for Rehabilitation and Research
2809 Main Street
Houston, TX 77002
(713) 797-1440

WHERE IT IS USED

Assembly
Benchwork

PROBLEM(S) IT OVERCOMES

use of only one hand; upper extremity weakness

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

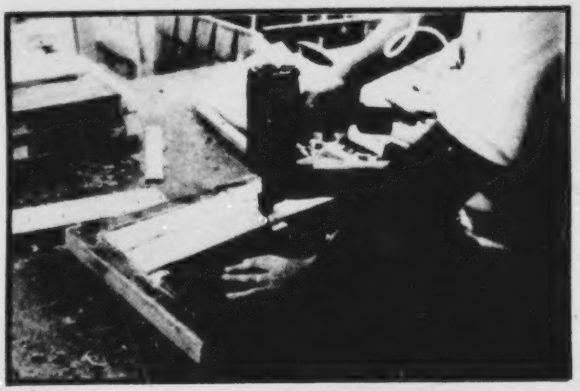
HOW IT WORKS

The wood fixture is designed to use quick acting toggle clamps that accurately position and locate the bolt for deburring operations. By actuating the toggle and rotating the bolt head, both ends of the drilled hole can be deburred quickly and accurately.
The job for which this fixture was designed required 1000 bolt heads to be deburred and there was little chance that a job like this would be done again. Thus, the engineer constructed the fixture out of wood and used a standard toggle clamp.

(Information based on Examples of Jig and Fixture Design as Applied to the Severely Disabled Functioning in a Sheltered Workshop, Biddy, Smith and Swarts.)

JIG FOR A STAND THAT HOLDS HEAVY BAGS

Jig with 4 boards in place



Boards of platform are being fixed in place with a staple gun

The platform is being removed

JIG FOR A STAND THAT HOLDS HEAVY BAGS

DEVELOPER

Gary Larson
Plant Manager of the
Superior Vocations Ctr.
431 Tower Avenue
Superior, WI 54880
(715) 392-6171

CONTACT PERSON

Gary Larson or
Toby Johnson, Exec. Dir.
Superior Vocations Center
431 Tower Avenue
Superior, WI 54880
(715) 392-6171

WHERE IT IS USED

Assembly
Benchwork

PROBLEM(S) IT OVERCOMES

difficulty in maintaining consistency in assembling the bag stands as required by manufacturer

FIELD TESTED

yes

in use at the Superior Vocations Center

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

The wooden bag stand holds heavy bags of materials such as cement, lime or salt. The bags that are placed on the stand are moved around by a forked dolly that slides under the stand. To make the stand, boards of approximate size are placed in position in the jig to obtain the exact finished size and placement. The boards are then stapled into place.

(Information based on personal interview.)

A JIG FOR DRIVING SET SCREWS

Photograph courtesy of Albert E. Swarts, P.E.

A JIG FOR DRIVING SET SCREWS

DEVELOPER

Albert E. Swarts, P.E.
Richard L. Biddy, Dir.
Vocational Industrial
Center - (Houston)
Donald R. Smith, PH.D.
Texas A & M University -
(College Station)

CONTACT PERSON

Albert E. Swarts, P.E.
Vocational Industrial Ctr.
Institute for Rehabilitation and Research
1809 Main Street
Houston, TX 77002
(713) 797-1440

WHERE IT IS USED

Assembly
Benchwork

PROBLEM(S) IT OVERCOMES

limited grasp; poor hand-eye coordination; limited dexterity

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

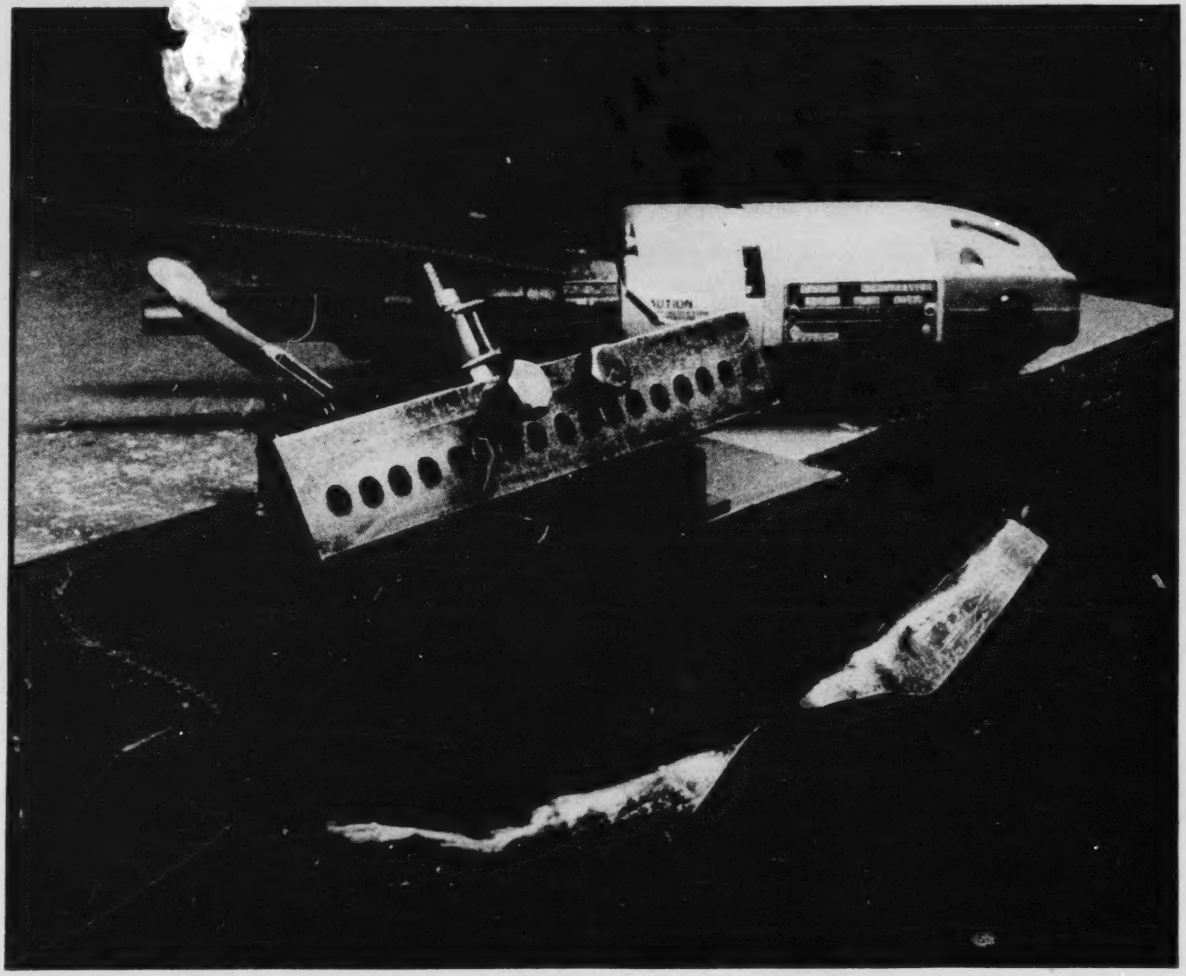
May be made at a minimal cost.

HOW IT WORKS

The free-standing jig is designed to hold 25 blocks in a clip-type chute utilizing gravity feed. It is mounted at a 45 degree angle to the work table. As each block slides down the chute, a spring-loaded feed mechanism positions the block under a locating plate. The locating plate has 2 fixed location tool guide holes allowing for the accurate placement of the 2 screws. The user simply drops the 2 screws into the locator holes and sets the screws using either a power screwdriver or a push-type screwdriver. When finished locating and placing the 2 screws, the springloader ejector mechanism removes the completed subassembly into a parts bin and locates the next block.

(Information based on Examples of Jig and Fixture Design as Applied to the Severely Disabled Functioning in a Sheltered Workshop, Biddy, Smith and Swarts.)

A JIG FOR REMOVING SCREWS FROM TERMINAL BLOCKS



Photograph courtesy of Albert
E. Swarts, P.E.

A JIG FOR REMOVING SCREWS FROM TERMINAL BLOCKS

DEVELOPER

Albert E. Swarts, P.E.
Richard L. Biddy, Dir.
Vocational Industrial
Center - (Houston)
Donald R. Smith, PH.D.
Texas A & M University -
(College Station)

CONTACT PERSON

Albert E. Swarts, P.E.
Vocational Industrial Ctr.
Institute for Rehabilitation and Research
2809 Main Street
Houston, TX 77002
(713) 797-1440

WHERE IT IS USED

Assembly
Benchwork

PROBLEM(S) IT OVERCOMES

grasping coordination problems; limited use of hands

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

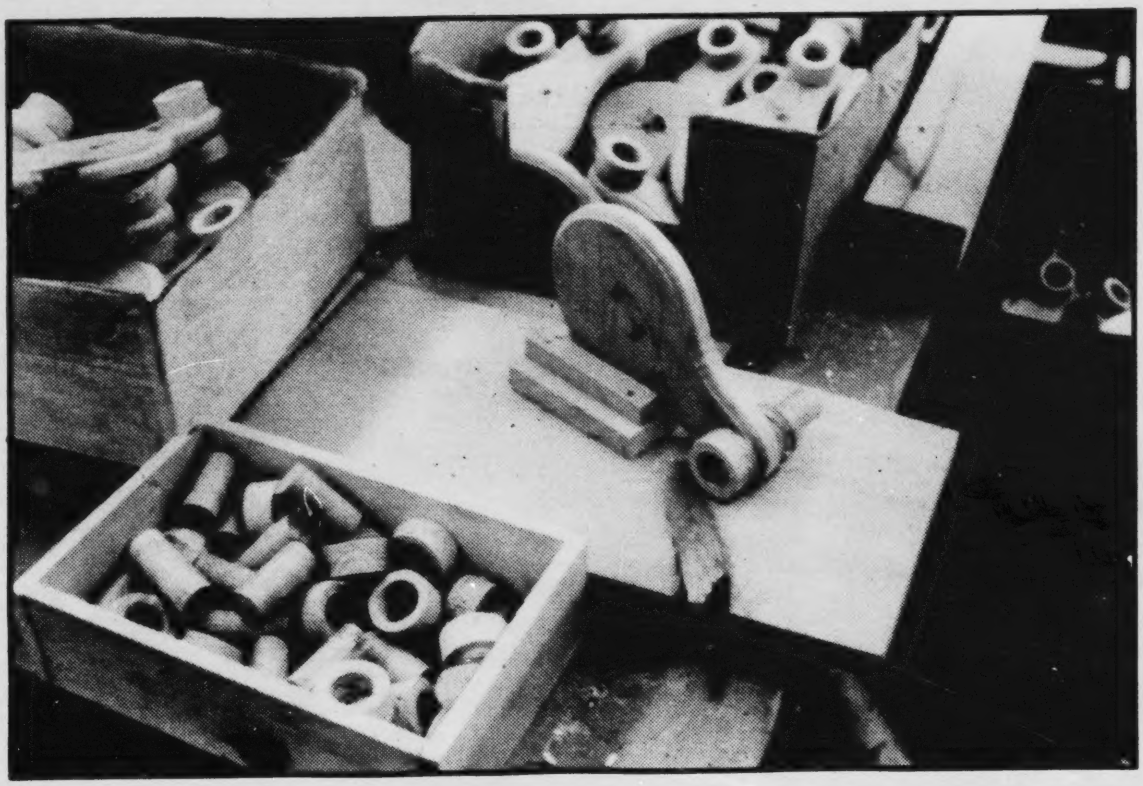
May be made at a minimal cost.

HOW IT WORKS

The jig is specifically designed to remove #8 and #6 screws from electrical terminal blocks. It has holes drilled in it according to the spacing of the screws and centered directly over each screw. Seventeen holes are drilled in the jig as this accommodates the largest size terminal block. The holes are sized to allow for different types of screwdrivers. Two 3/8" bolts are used as locating pins. The jig is attached to a standard toggle clamp to allow for a firm work base. The jig is located over the hopper of a drop chute such that the removed screws will fall directly into the tote pan immediately below. Power screwdrivers can be used with very good results, but hand screwdrivers can be used equally well.

(Information based on Examples of Jig and Fixture Design as Applied to the Severely Disabled Functioning in a Sheltered Workshop, Biddy, Smith and Swarts.)

JIG TO HOLD WOOD



JIG TO HOLD WOOD

DEVELOPER

John Wenstadt
Northern Wisconsin Center
for the Developmentally
Disabled
Box 340
Chippewa Falls, WI 54729
(715) 723-5542

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Benchwork

PROBLEM(S) IT OVERCOMES

limited control of arm and hand movement

FIELD TESTED

yes

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

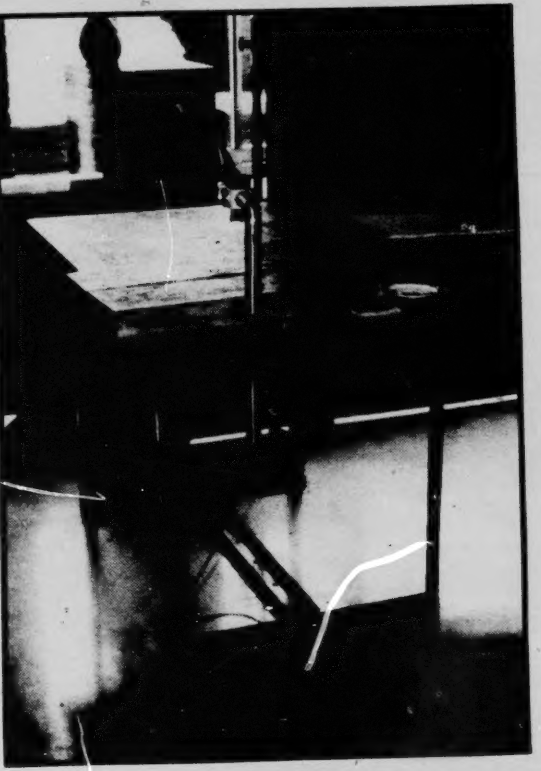
May be made at a minimal cost.

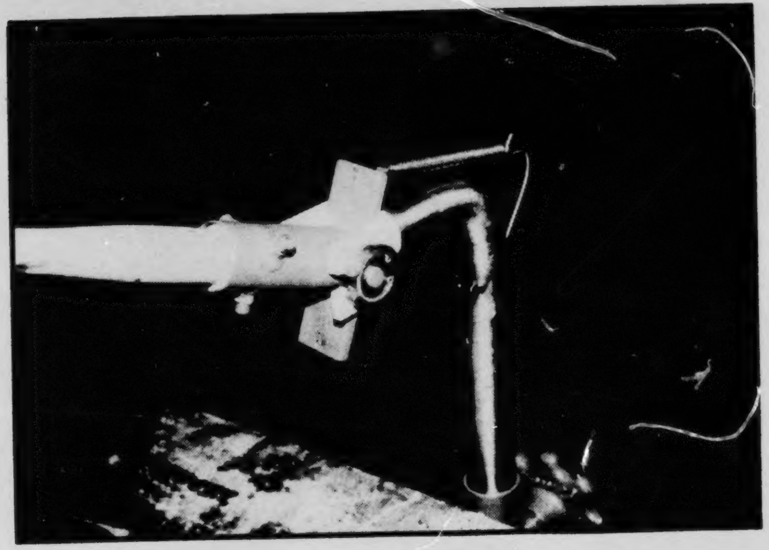
HOW IT WORKS

A dowel is inserted through one end of a piece of wood. The jig holds the wood in place making the placement of the dowel easier.

(Information based on personal interview.)

MALLET, FOOT OPERATED





Photographs courtesy of
David F. Law, Jr.

MALLET, FOOT OPERATED

DEVELOPER

David F. Law, Jr.
Woodrow Wilson Rehab. Ctr.
Rehab. Engineering Dept.
Fishersville, VA 22939
(703) 885-9724

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Benchwork

PROBLEM(S) IT OVERCOMES

the need for two hands to use leather punches and stamps effectively

FIELD TESTED

yes

Woodrow Wilson Rehabilitation Center and Individual's Leather Shop

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

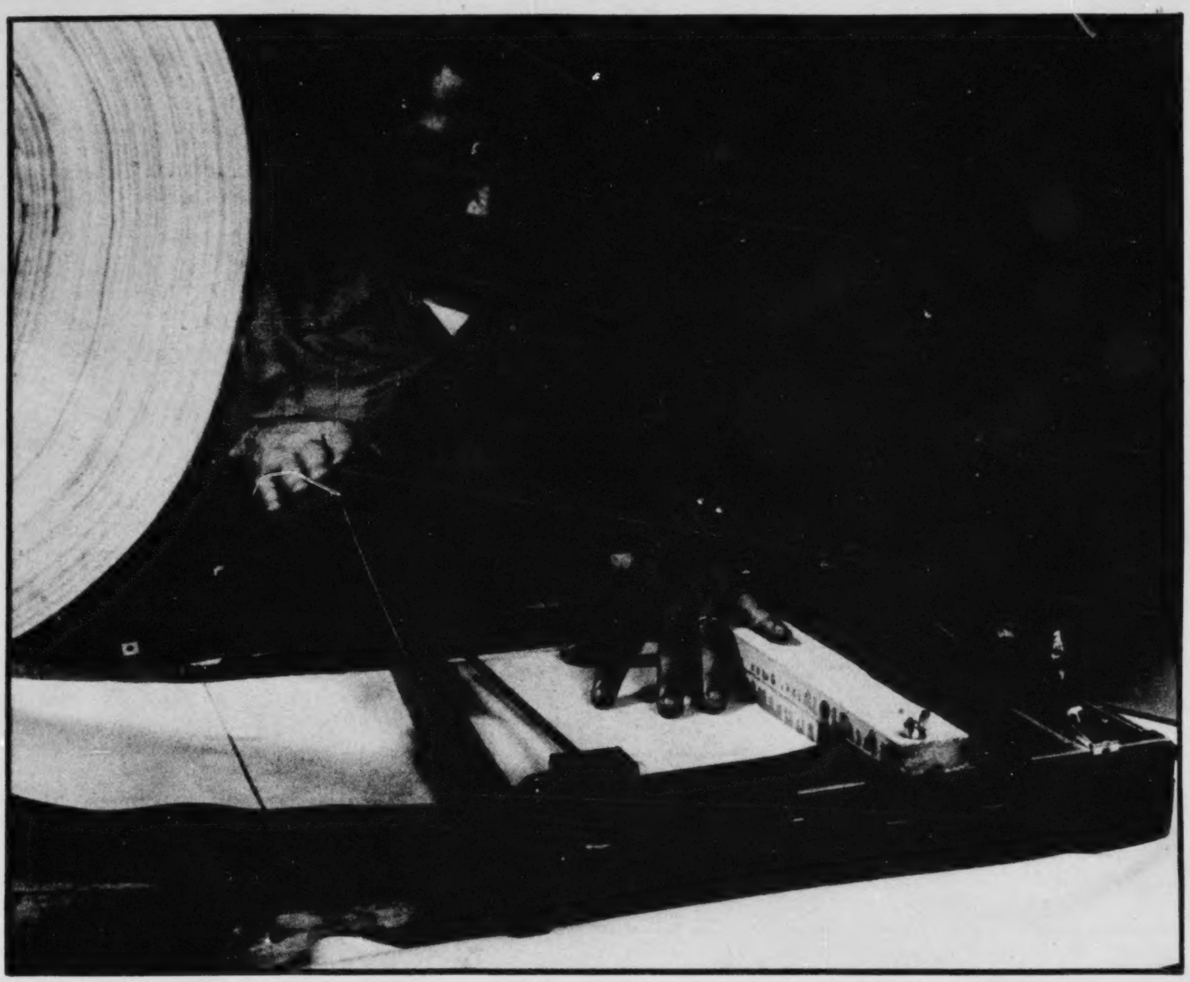
no

HOW IT WORKS

For use by hemiplegic individuals; utilizes foot depression of a pedal to swing mallet or hammer.

(Information provided by David F. Law, Jr.)

MODIFICATIONS TO A STANDARD PAPER CUTTER



Photograph courtesy of Albert
E. Swarts, P.E.

MODIFICATIONS TO A STANDARD PAPER CUTTER

DEVELOPER

Albert E. Swarts, P.E.
Richard L. Biddy, Dir.
Vocational Industrial
Center - (Houston)
Donald R. Smith, Ph.D.
Texas A & M University -
(College Station)

CONTACT PERSON

Albert E. Swarts, P.E.
Vocational Industrial Ctr.
Institute for Rehabilitation and Research
2809 Main Street
Houston, TX 77002
(713) 797-1440

WHERE IT IS USED

Assembly
Benchwork

PROBLEM(S) IT OVERCOMES

lower extremity weakness; strength limitations

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

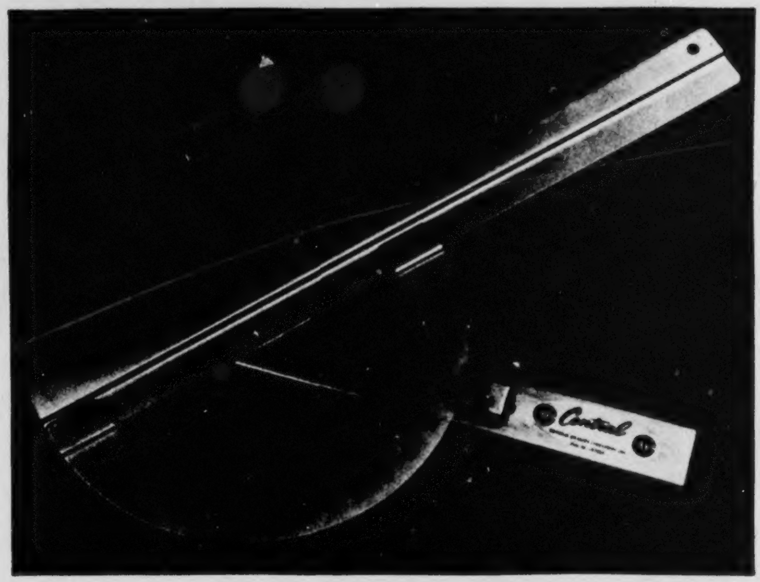
May be made at a minimal cost.

HOW IT WORKS

The alignment requirement of a standard paper cutter was simplified to cut rolls of plastic to specific lengths. A rack was built to hold rolls of plastic and permit them to unroll in line with a lower guide on the paper cutter. An adjustable stop clamped to the bed of the paper cutter stops the plastic at the right length. The stop and guide must be tight on the bed of the paper cutter to prevent the plastic from sliding under it. The best cuts are made when the plastic is placed as near as possible to the lower end (away from the blade hinge) of the paper cutter. To maintain a piece count, a counter can be placed so that it is activated when the blade is raised.

(Information based on Examples of Jig and Fixture Design as Applied to the Severely Disabled Functioning in a Sheltered Workshop, Biddy, Smith and Swarts.)

PROTRACTOR AND SAW GUIDE



Photograph courtesy of
American Foundation for
the Blind

PROTRACTOR AND SAW GUIDE

DEVELOPER

CONTACT PERSON

Alex H: Townsend
American Foundation for
the Blind
15 West 16th Street
New York, NY 10011
(212) 620-2169

WHERE IT IS USED

Benchwork
Construction

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundation for the Blind
15 West 16th Street
New York, NY 10011

$17.00

HOW IT WORKS

This device is particularly useful with an electric saw. Rivets have been placed to serve as single raised dots at each 5°, with double raised dots at 30° and 60°, and three raised dots at 0° which is at 90° to the base. The lines on the scale are slightly depressed. It is made of cadmium plated steel and weighs 1½ pounds.

(Information based on American Foundation for the Blind literature.)

SANDING BLOCK

Photograph not available

SANDING BLOCK

DEVELOPER

Richard LeBlanc
Frederick J. Gaenslen School
1301 E. Auer Avenue
Milwaukee, WI 53212
(414) 264-2535

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Sanding

PROBLEM(S) IT OVERCOMES

gripping; hand control

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

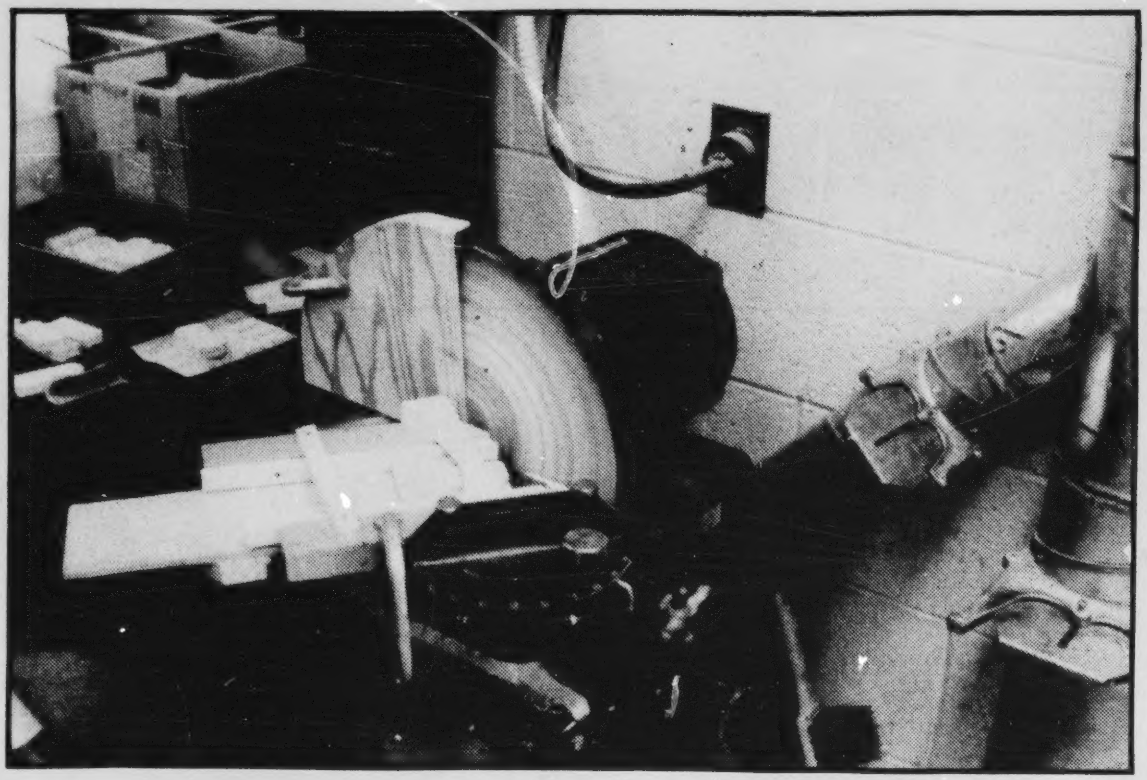
May be made at a minimal cost.

HOW IT WORKS

A dowel glued to the sanding block is inserted into a hole drilled in the wooden handle and secured with glue. The handle is large enough to be used by a person with gross motor coordination.

(Information provided by Miriam Rosenburg and Richard LeBlanc, Gaenslen School.)

SANDING JIG



SANDING JIG

DEVELOPER

John Wenstadt
Northern Wisconsin Center for the Developmentally Disabled
Box 340
Chippewa Falls, WI 54729
(715) 723-5542

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Benchwork

PROBLEM(S) IT OVERCOMES

limited control of hand and arm movement

FIELD TESTED

yes

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

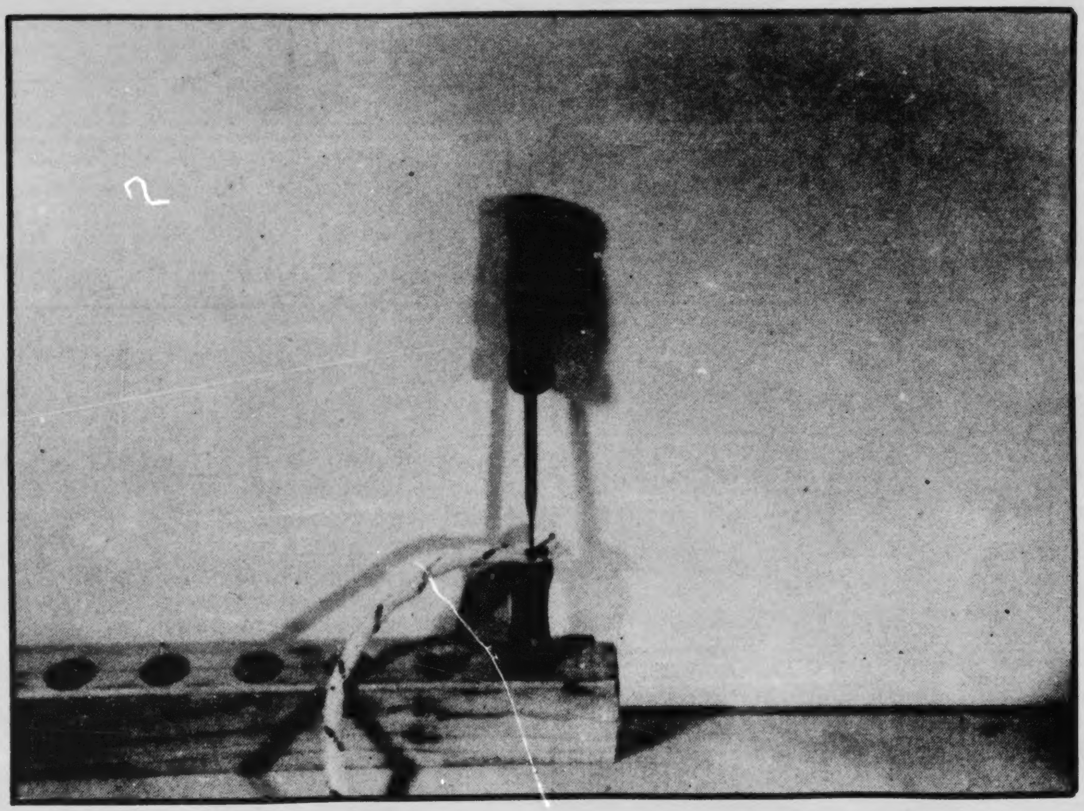
May be made at a minimal cost.

HOW IT WORKS

The jig provides an area, wide and deep enough for the piece of wood it is to sand. It is secured to the table so the angle to be sanded is the angle that it would fit tight against.

(Information based on personal interview.)

SIMPLE HAND TOOLS IMPROVE OPERATION



Photograph courtesy of California Department of Rehabilitation

SIMPLE HAND TOOLS IMPROVE OPERATION

DEVELOPER

Charles Eckles
Independent Contract
Consultant
(213) 360-4180

CONTACT PERSON

California Department of
Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Benchwork

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

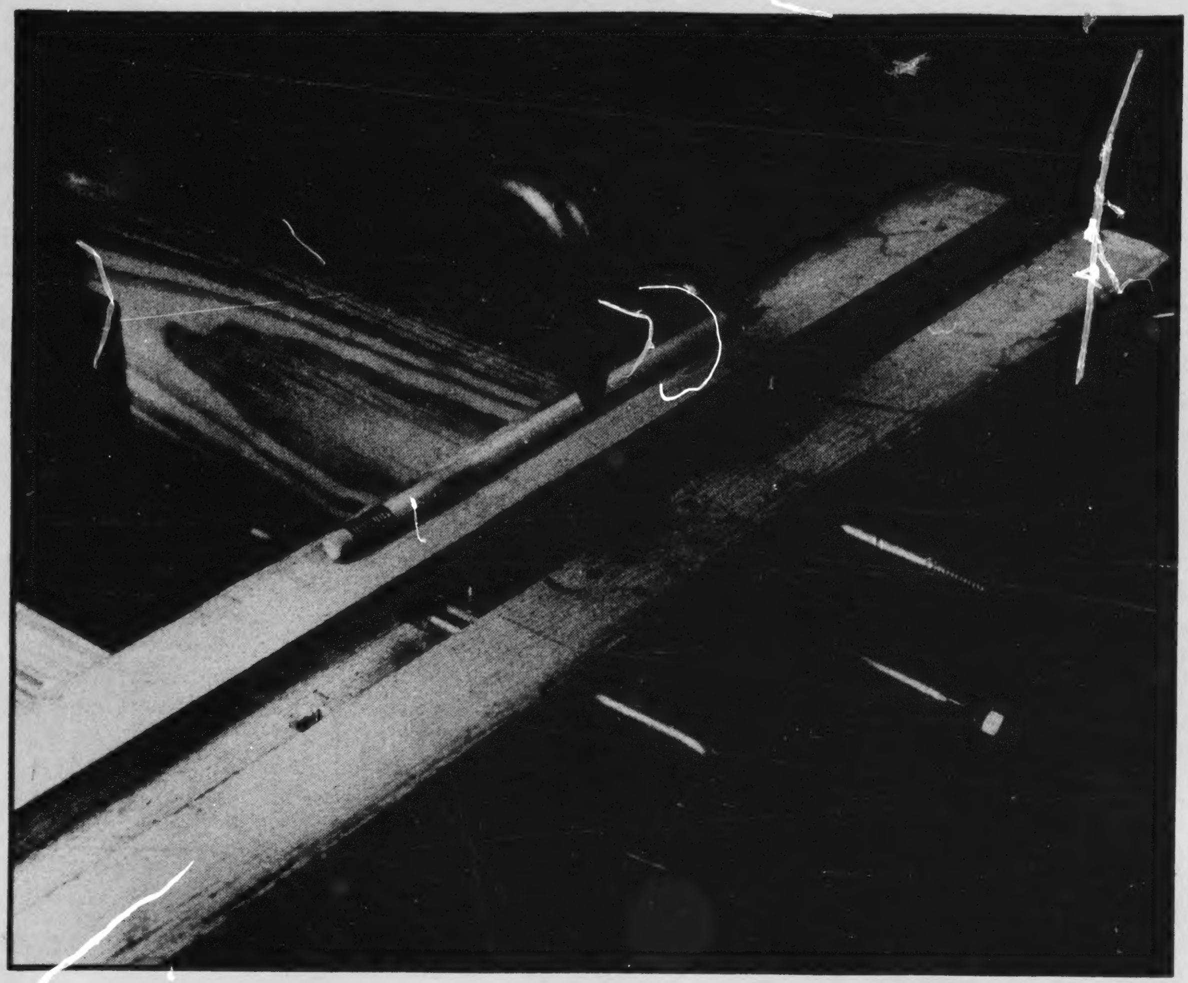
May be made at a minimal cost.

HOW IT WORKS

This is a simple multiple-part positioning jig and hand tool to help solve the frustrating and messy job of assembling jump ropes. Instead of the regular process of assembling jump ropes by applying glue to the end of the rope and forcing it into the handle by hand, the process is changed by pouring a small amount of glue into the jig-positioned handles and then pushing the rope into the hole with a tamper made from a conventional screwdriver.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

A SPOTWELDER HOLDING FIXTURE



Photograph courtesy of Albert
E. Swarts

A SPOTWELDER HOLDING FIXTURE

DEVELOPER

Albert E. Swarts, P.E.
Richard L. Biddy, Dir.
Vocational Industrial Center - (Houston)
Donald R. Smith, Ph.D.
Texas A & M University - (College Station)

CONTACT PERSON

Albert E. Swarts, P.E.
Vocational Industrial Ctr.
Institute for Rehabilitation and Research
2809 Main Street
Houston, TX 77002
(713) 797-1440

WHERE IT IS USED

Assembly
Benchwork

PROBLEM(S) IT OVERCOMES

dexterity limitations

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

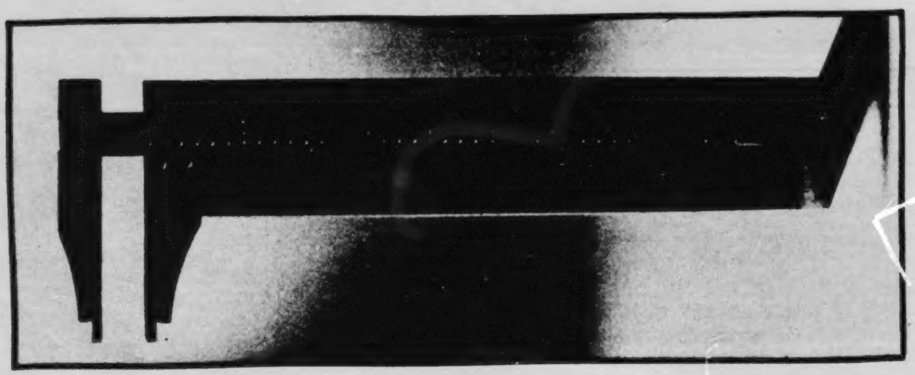
May be made at a minimal cost.

HOW IT WORKS

The fixture is designed for spotwelding brass connectors to both ends of a Nichrome ribbon, requiring accurate placement of the welding point. Holding fixtures, to insure proper length, are supplied but do not effect good placement of the weld. To remedy this, a frame was built around the welding tongs with a channel to center the fixture along the line of the welder tip. A stop is used to center the weld point on the other axis. This locates the fixture on 3 sides. To reduce handling and dexterity requirements, the stop is on a slide and a second one is on the other side. This permits the operator to slide the fixture through the channel to the other end instead of lifting it out and turning it around to weld the second end.

(Information based on Examples of Jig and Fixture Design as Applied to the Severely Disabled Functioning in a Sheltered Workshop, Biddy, Smith and Swarts.)

STANLEY CALIPER RULE



Photograph courtesy of
American Foundation for
the Blind

STANLEY CALIPER RULE

DEVELOPER

CONTACT PERSON

Alex H. Townsend
American Foundation for the Blind
15 West 16th Street
New York, NY 10011
(212) 620-2169

WHERE IT IS USED

Benchwork
Construction

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundation for the Blind
15 West 16th Street
New York, NY 10011

$19.00

HOW IT WORKS

The sliding jaw has a raised scale graduated in 1/8" marks indicated by a single raised dot. For quick reading, the ½" mark has double raised dots and the 1" mark has three raised dots for inside and outside measurement. The stationary jaw has double raised dots on the face to indicate inside and outside measurements.

(Information based on American Foundation for the Blind literature.)

A TABLE-FIXTURE FOR THE ASSEMBLY OF ELECTRICAL CONDUIT WIRING

Photograph courtesy of Albert
E. Swarts, P.E.

A TABLE FIXTURE FOR THE ASSEMBLY OF ELECTRICAL CONDUIT WIRING

DEVELOPER

Albert E. Swarts, P.E.
Richard L. Biddy, Dir.
Vocational Industrial Center - (Houston)
Donald R. Smith, Ph.D.
Texas A & M University - (College Station)

CONTACT PERSON

Albert E. Swarts, P.E.
Vocational Industrial Ctr.
Institute for Rehabilitation and Research
2809 Main Street
Houston, TX 77002
(713) 797-1440

WHERE IT IS USED

Assembly
Benchwork

PROBLEM(S) IT OVERCOMES

overall bulkiness of the assembly operation

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

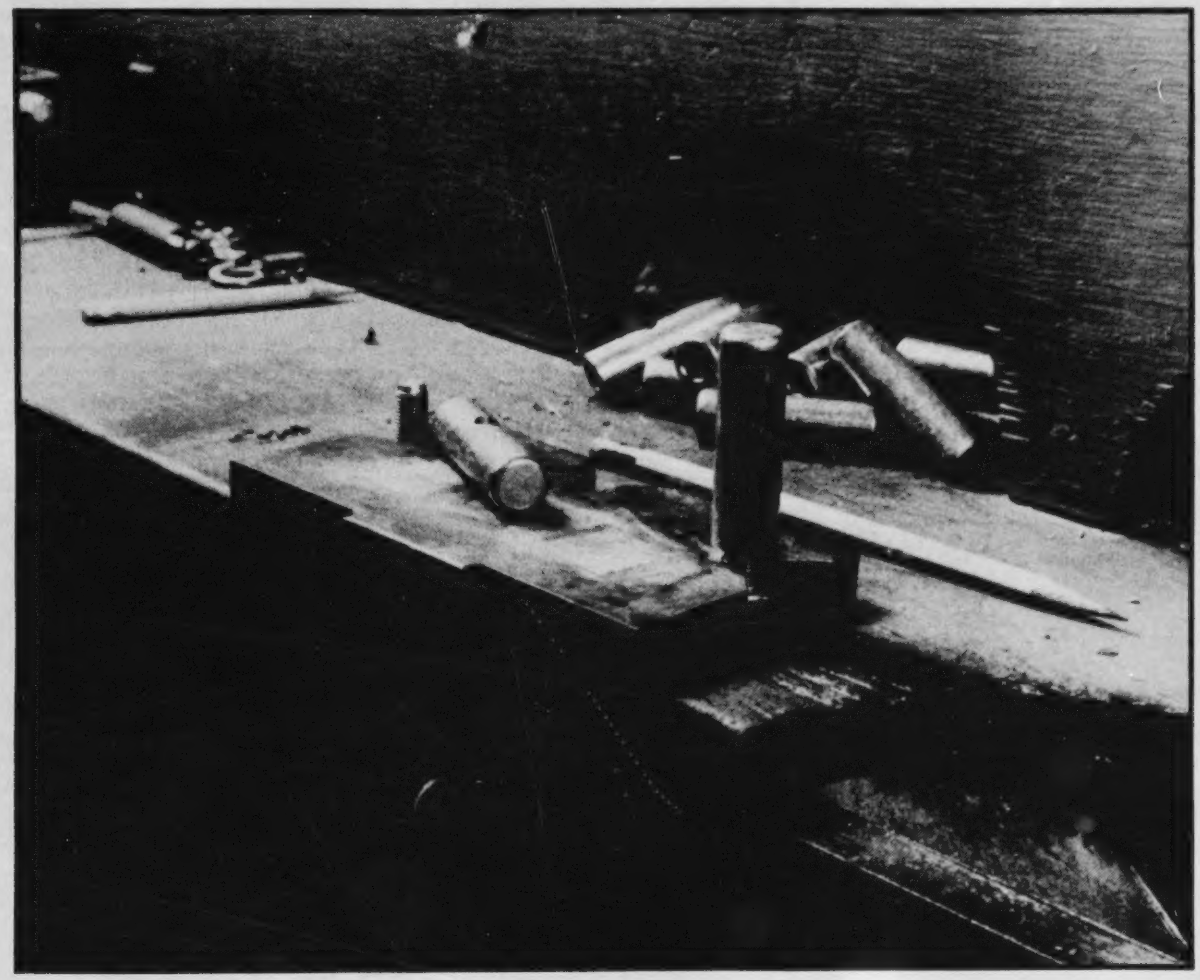
May be made at a minimal cost.

HOW IT WORKS

The worktable accommodates two users. The main features of the table fixture are 2 flexible conduit holding tubes constructed out of 3/4' rigid aluminum conduit bent in a circle. Users insert the flexible conduit into the bottom part of the rigid conduit and force it through until approximately 2 feet of flexible conduit comes out of the top of the tube. The core wiring (2 wires stored in spools at the middle of the worktable) is inserted into the flexible conduit and forced through. With the assistance of "fishtape", the core wiring is pulled through the flexible conduit from the top. The advantage of this worktable design is that less space is required and the work is conveniently located so that users can function in a comfortable manner.

(Information based on Examples of Jig and Fixture Design as Applied to the Severely Disabled Functioning in a Sheltered Workshop, Biddy, Smith and Swarts.)

WORKSTATION AND ASSOCIATED FIXTURES FOR THE ASSEMBLY OF VALVE HANDLES



Photograph courtesy of Albert
E. Swarts, P.E.

WORKSTATION AND ASSOCIATED FIXTURES FOR THE ASSEMBLY OF VALVE HANDLES

DEVELOPER

Albert E. Swarts, P.E.
Richard L. Biddy, Dir.
Vocational Industrial Center - (Houston)
Donald R. Smith, PH.D.
Texas A & M University - (College Station)

CONTACT PERSON

Albert E. Swarts, P.E.
Vocational Industrial Ctr.
Institute for Rehabilitation and Research
2809 Main Street
Houston, TX 77002
(713) 797-1440

WHERE IT IS USED

Assembly
Benchwork

PROBLEM(S) IT OVERCOMES

upper extremity weakness; use of only one hand

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

The two-person worktable is designed to centralize the work into a compact and manageable work area. Two parts bins are incorporated into the station with fixtures to assist in the assembly. Two metal drop chutes with micro-switch counters are installed at 2 convenient locations to facilitate in the discharging and counting of the finished parts.
For users possessing upper extremity limitations, or who have use of only one hand, a fixture has been designed to facilitate assembly. The fixture may be clamped to the worktable top at either end of the table next to the discharge slot of the drop chutes. Slots are milled into the base of the fixture at 2 sides to hold the head of the bolt and prevent it from twisting when the sleeve is screwed on. With proper training, users are able to attach the sleeve to the bolt and with a twist and inward rotation, discharge the completed assembly into the drop chute.

(Information based on Examples of Jig and Fixture Design as Applied to the Severely Disabled Functioning in a Sheltered Workshop, Biddy, Smith and Swarts.)

COMMUNICATION

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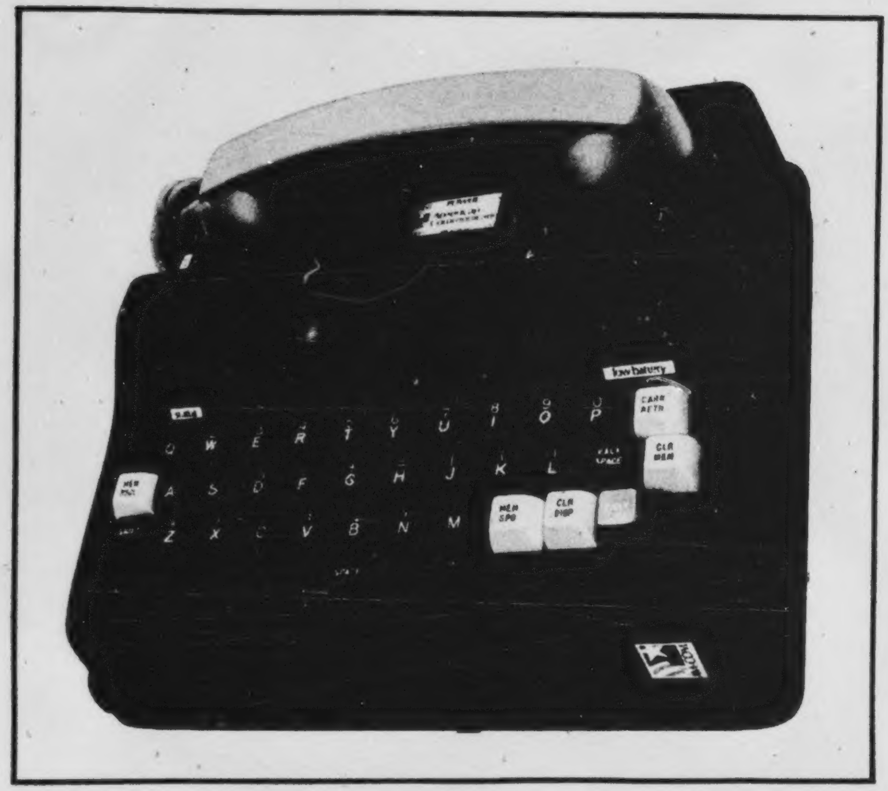
VIP Communicator 208

Visual Alarm Clock/Sleep Timer 210

AM-COM I (TTY)



Photograph courtesy of
American Communication
Corporation

AM-COM I (TTY)

DEVELOPER

American Communication Corporation
180 Roberts Street
East Hartford, CT 06108
(203) 289-3491
(Voice or TTY)

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communication

PROBLEM(S) IT OVERCOMES

inability of someone who is deaf to communicate by phone

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

American Communication Corporation
180 Roberts Street
East Hartford, CT 06108

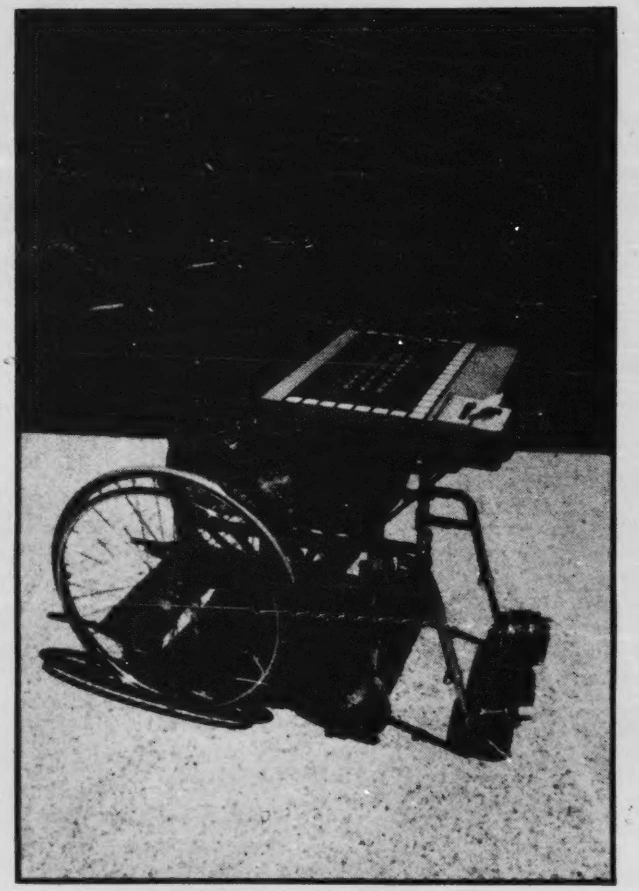
AM-COM 1	$495
Shipping	$ 10
Emergency message feature	$ 65
Carrying case	$ 25

HOW IT WORKS

AM-COM 1 is battery operated and will function without being plugged into an electrical outlet. Now you can call from a pay phone, at work, or even while visiting. AM-COM 1 is compatible with most automatic phone answering equipment. In addition to AM-COM 1's 900 character built-in memory storage system, unlimited memory is possible with the use of a supplementary tape recorder. In the event of an emergency and help is needed, dial the emergency number and depress the Emergency Key and 1 key for police, 2 key for fire or 3 key for ambulance. AM-COM 1 will automatically send a TTY message for help repeatedly with your name and address while you handle the emergency.

(Information based on company literature.)

AUTOCOM



Photograph courtesy of the
Trace Center

AUTOCOM

DEVELOPER

Trace Center
University of Wisconsin
314 Waisman Center
1500 Highland Avenue
Madison, WI 53706

CONTACT PERSON

Michael Reynolds
Telesensory Systems
3408 Hillview
Palo Alto, CA 94304
(415) 493-2626

WHERE IT IS USED

Communication
Education

PROBLEM(S) IT OVERCOMES

difficulty in speaking or writing due to severe motoric impairment

FIELD TESTED

yes

38 individuals and sites in a U.S. Office of Education supported evaluation study

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304

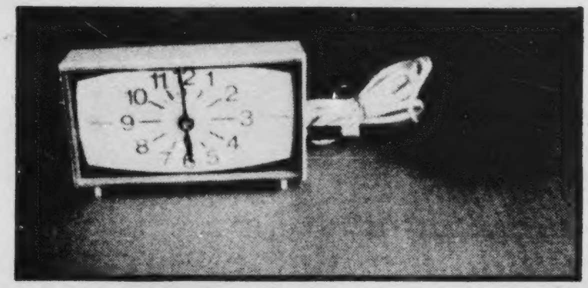
$5,975

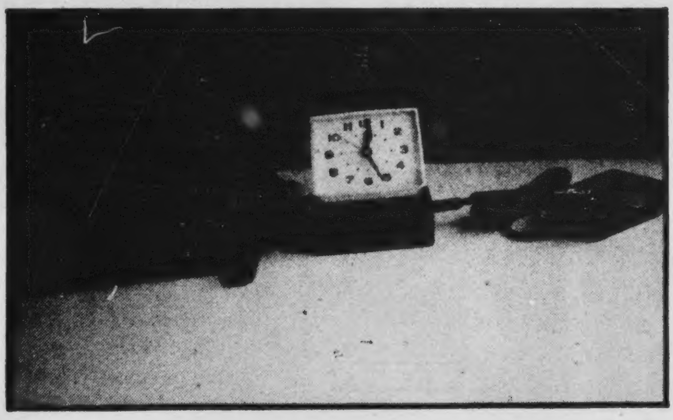
HOW IT WORKS

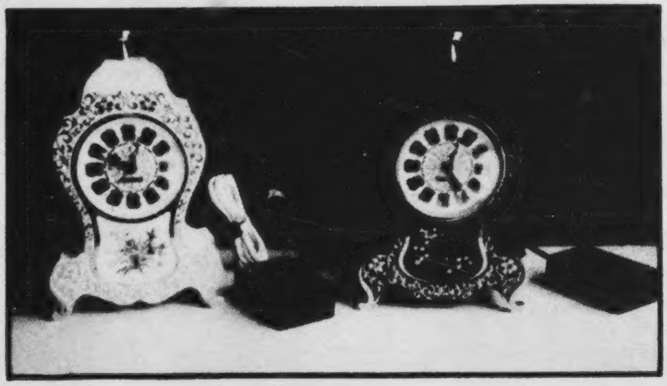
The Autocom is a portable electronic communication aid built into a wheelchair laptray. A magnet mounted on a handpiece or headstick is used to point to vocabulary items on the board's grid. Autocom users can communicate without assistance. A message can be produced on the 32-character LED display and or printed onto a 3-inch wide paper roll. By means of interfacing equipment and or a connecting cable the user can also print messages onto certain electric typewriters, teletypewriters, TV monitors, modified television sets, CRT displays, other Autocoms or Autocompatible aids, and to some standard computer peripheral equipment. Messages can be displayed on an optional Auxiliary Message Viewer (AMV) that faces toward the person(s) to whom the message is directed. The 32-character LED display of the AMV allows comfortable, spontaneous conversation. The battery-powered Autocom will operate for 8 hours before needing a recharge. A single vocabulary selection can activate letters, words, phrases, complete sentences or whole paragraphs. By using up to 59 "levels" of electronic memory, the Autocom user can construct and store several thousand vocabulary items. An adjustable delay activation allows the user to slide the handpiece over the board items without selecting unwanted vocabulary items.

(Information based on company literature.)

AWAKENING DEVICE FOR HEARING IMPAIRED







Photographs courtesy of
Alerton Systems Enterprises

AWAKENING DEVICE FOR HEARING IMPAIRED

DEVELOPER

Alerton Systems Enterprises
1735 N. Morningside St.
Orange, CA 92667
(714) 637-4683

CONTACT PERSON

Harry M. Comer
Alerton Systems Enterprises
1735 N. Morningside St.
Orange, CA 92667
(714) 637-4683

WHERE IT IS USED

Communication
Home Economics
Homemaking

PROBLEM(S) IT OVERCOMES

inability to hear a convential alarm clock

FIELD TESTED

yes

United States

REGULATORY APPROVAL

yes

WARRANTY PROVIDED

yes

FOR SALE

Alerton Systems Enterprises
1735 N. Morningside St.
Orange, CA 92667

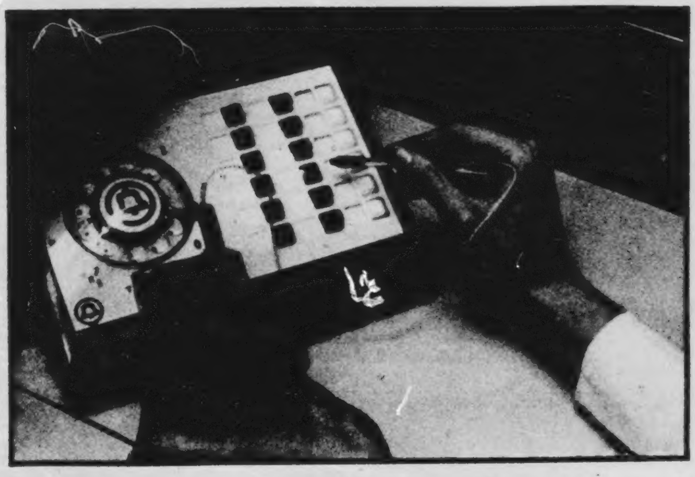
$34.00 to $42.50

HOW IT WORKS

The clock is set for awakening time. A module (box) connected to an electronic circuit in the clock, is triggered to pulsate for awakening the person using it. It (module) is placed under the pillow for use. Travelling salespersons and persons with difficulty in hearing ordinary clock alarms find this device of special use.

(Information based on Alerton Systems Enterprises literature.)

BEJED PIONEER LIGHT PROBE



Photograph courtesy of
Telephone Pioneers of America,
Oregon Chapter #31

BEJED PIONEER LIGHT PROBE

DEVELOPER

John Dannenmann
Bill Johnson
Pacific Northwest Bell
Telephone

CONTACT PERSON

Oregon Chapter #31
Telephone Pioneers of
America
421 S.W. Oak St., Room 114
Portland, OR 97204
(503) 242-8706

WHERE IT IS USED

Indicate the brightness of a light source

Operate key telephones or switchboards

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

evaluated by American Federation for the Blind and Bell Telephone Laboratories

REGULATORY APPROVAL

no

WARRANTY PROVIDED

yes

FOR SALE

Light Probe
Oregon Chapter #31
Telephone Pioneers of America
421 S.W. Oak Street, Room 114
Portland, OR 97204

$20.00

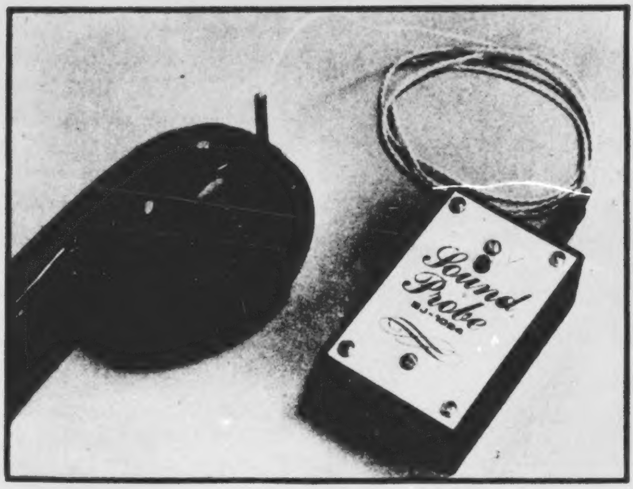
HOW IT WORKS

The amplifier model is a portable plastic box 3½"x2¼"x1¼". The unit is a small speaker-amplifier with a thumb wheel on-off volume switch. At the top is a jack for the 2' cord at the end of which is the sensor. The user puts the sensor near a light source and a tone is emitted from the speaker corresponding to the intensity of the light. Telephone lights are indicated as follows: incoming calls is a slow interrupted tone; hold is a fast interrupted tone; line in use is a steady tone and a clear line produces no tone.

Other uses have been in finding desired elevator floors, following hallways with overhead lights and assuring lights are off by an x-ray developing technician. It operates with a 9 volt battery, A.C. adapters available at extra cost.

(Information based on Oregon Chapter #31, Telephone Pioneers of America literature.)

BEJED PIONEER SOUND PROBE



Sound Probe

Photograph courtesy of
Telephone Pioneers of
America, Oregon Chapter #31

BEJED PIONEER SOUND PROBE

DEVELOPER

John Dannenmann
Bill Johnson
Pacific Northwest Bell
Telephone

CONTACT PERSON

Oregon Chapter #31
Telephone Pioneers of
America
421 S.W. Oak St., Rm. 114
Portland, OR 97204
(503) 242-8706

WHERE IT IS USED

Speaking on the telephone

PROBLEM(S) IT OVERCOMES

hearing impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

no

WARRANTY PROVIDED

yes

FOR SALE

Sound Probe
Oregon Chapter #31
Telephone Pioneers of America
421 S.W. Oak Street, Room 107
Portland, OR 97204

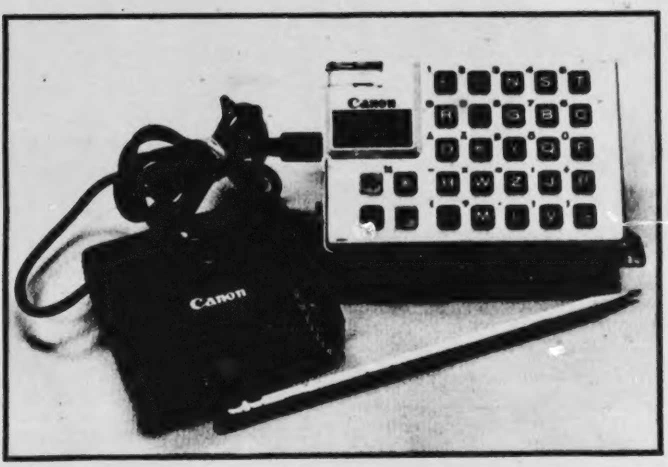
$25.00

HOW IT WORKS

This is a portable unit which converts sound into light flashes. The unit is turned on when the user plugs the pick-up microphone, (which has been attached to the telephone receiver), into the jack of the Sound Probe. The lamp on the unit varies in brightness with the loudness of the sound. To communicate with the user, who must be able to speak, the speaker can respond yes or no-no to the user's questions. There will be a single flash for the yes response and two flashes for the no-no response. Tapping on the telephone receiver, once for yes, twice for no-no, will also produce the light flashes.

(Information based on Oregon Chapter #31, Telephone Pioneers of America literature.)

CANON COMMUNICATOR



Photograph courtesy of
Telesensory Systems Inc.

CANON COMMUNICATOR

DEVELOPER

Canon

CONTACT PERSON

Michael Reynolds, Non-vocal Communications Manager
Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304
(415) 493-2626

WHERE IT IS USED

Communication

PROBLEM(S) IT OVERCOMES

inability to speak; limited movement

FIELD TESTED

information not available

REGULATORY APPROVAL

information not abailable

WARRANTY PROVIDED

yes

FOR SALE

Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304

distributed by TSI in North America only

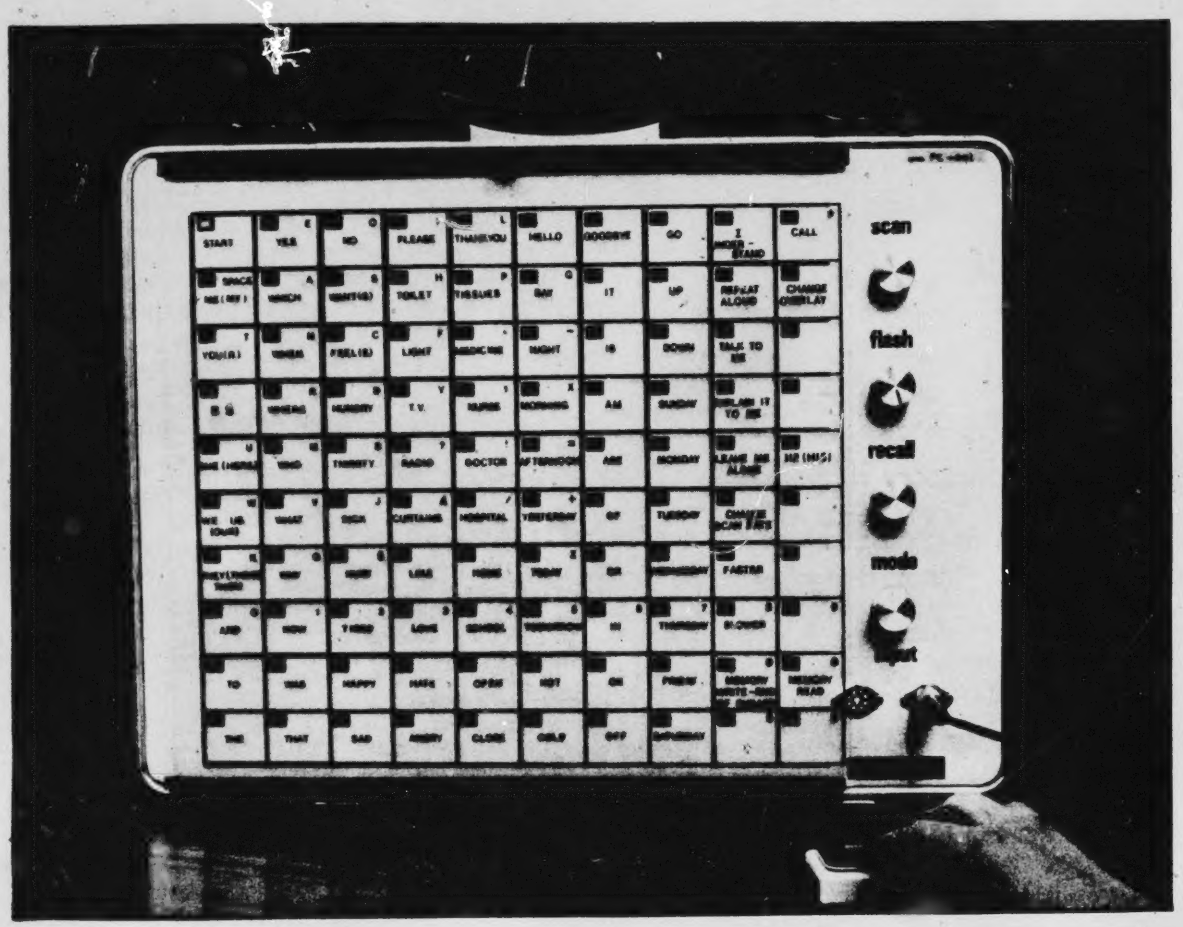
$599.00

HOW IT WORKS

The Canon Communicator allows communication by entering messages on a keyboard, letter by letter. The system then prints the messages on a paper tape. The communicator is pocket-sized, powered by a rechargeable battery pack, and can be attached to the wrist, leg, or wheelchair. Key overlays prevent inadvertent entries by those with limited fine motor control.

(Information reprinted with permission from Telesensory Systems, Inc. literature.)

COMMUNICATOR


START
YES
NO
PLEASE
THANK YOU
HELLO
GOODBYE
GO
I UNDER-STAND
CALL
TOILET
TISSUES
IT
UP
REPEAT ALOUD
CHANGE OVERLAY
YOU(R)
LIGHT
MEDICINE
IS
DOWN
TALK TO ME
T.V.
AM
EXPLAIN IT TO ME
RADIO
DOCTOR
ARE
MONDAY
LEAVE ME ALONE
HOSPITAL
TUESDAY
FASTER
THURSDAY
SLOWER
OPEN
FRIDAY
MEMORY READ
CLOSE
OFF
SATURDAY
scan
flash
recall
mode
input

Photograph courtesy of
Possum Controls, Inc.

COMMUNICATOR

DEVELOPER

Possum Controls, Inc..
11 Fairacres Industrial Estate
Windsor Berkshire
England

CONTACT PERSON

Ann F. Gurr
Possum, Inc.
P.O. Box 451
Midwood Station
Brooklyn, NY 11230
(212) 243-1658

WHERE IT IS USED

Communicating

PROBLEM(S) IT OVERCOMES

no oral communication

FIELD TESTED

yes

Britain

REGULATORY APPROVAL

FDA

WARRANTY PROVIDED

yes

FOR SALE

Possum, Inc.
P.O. Box 451
Midwood Station
Brooklyn, NY 11230

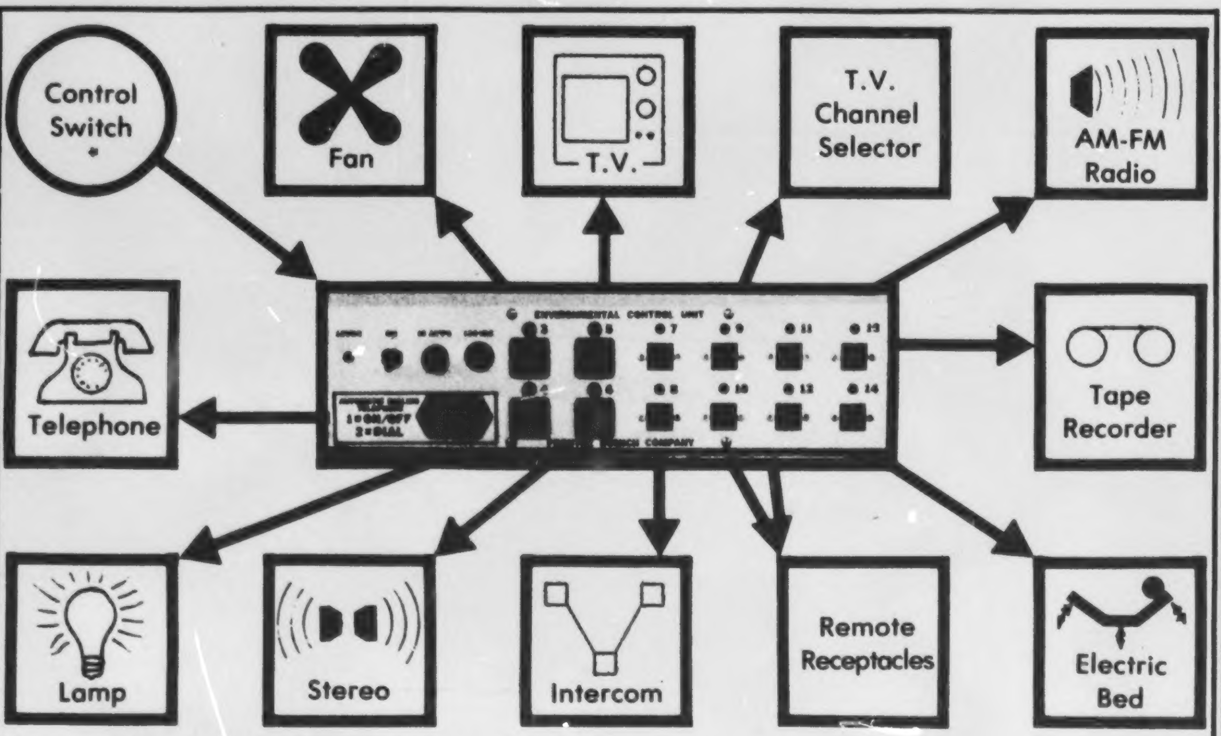
$990.00 plus shipping

HOW IT WORKS

The Communicator, 483mm x 356mm has a panel consisting of 100 cells in a 10x10 matrix. Each cell is labelled with a word or a phrase. Overlay sheets are provided on general themes including an alphabet and symbol sheet used to spell out words. Different sheets can be created to meet the user's need. There are three operating modes, mode 1 uses a single input switch. To use the first mode, the mode switch is set to mode 1, the input switch is activated and released causing the lamp in the start position to illuminate indicating the device has been turned on. (See Possum^{TM} Input Controls (p. 312) for types of operating switches.) When the input is activated and held the lamp will scan the panel horizontally at a preset rate. The input is released at the selected row then the lamp scans the vertical row until the input is activated again at the selected cell. After the input is released, the lamp flashes for a preset time then returns to the start position. A new selection can now be made. The memory can store up to forty cell messages which remain in memory with the unit turned off. One of the unit's controls is "attendant call". To use this control the cell marked call is selected causing the unit to emit a low tone pulsed for fifteen seconds. This unit uses charged batteries.

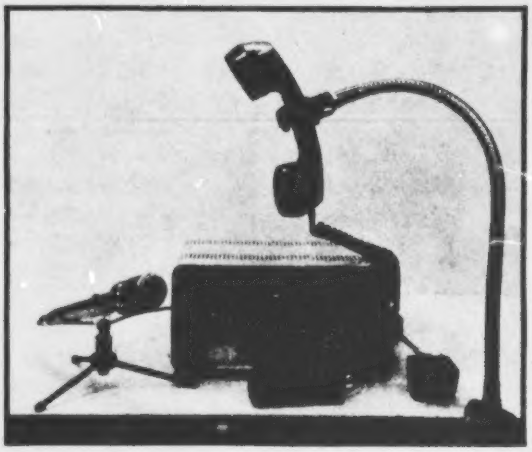
(Information based on manual and literature for Possum Communication.)

ELECTRONIC COMMUNICATION AIDS AND ENVIRONMENTAL CONTROL SYSTEMS


Control Switch *
Fan
T.V.
T.V. Channel Selector
AM-FM Radio
Telephone
ENVIRONMENTAL CONTROL UNIT
1=ON/OFF
2=DIAL
Tape Recorder
Lamp
Stereo
Intercom
Remote Receptacles
Electric Bed

*One control switch can operate many devices.

Environmental Control Unit



Automatic Dialing Telephone

Photographs courtesy of
Prentke Romich Company

ELECTRONIC COMMUNICATION AIDS AND ENVIRONMENTAL CONTROL SYSTEMS

DEVELOPER

Various Developers

CONTACT PERSON

Barry Romich
Prentke Romich Co.
RD 2, Box 191
Shreve, OH 44676
(216) 567-2906

WHERE IT IS USED

Communicating
Operate electrical items

PROBLEM(S) IT OVERCOMES

no oral communication; nearly total paralysis

FIELD TESTED

yes

REGULATORY APPROVAL

yes

Automatic Dialing Telephone FCC registered; some items VA approved

WARRANTY PROVIDED

yes

FOR SALE

Prentke Romich Company
RD 2, Box 191
Shreve, OH 44676

HOW IT WORKS

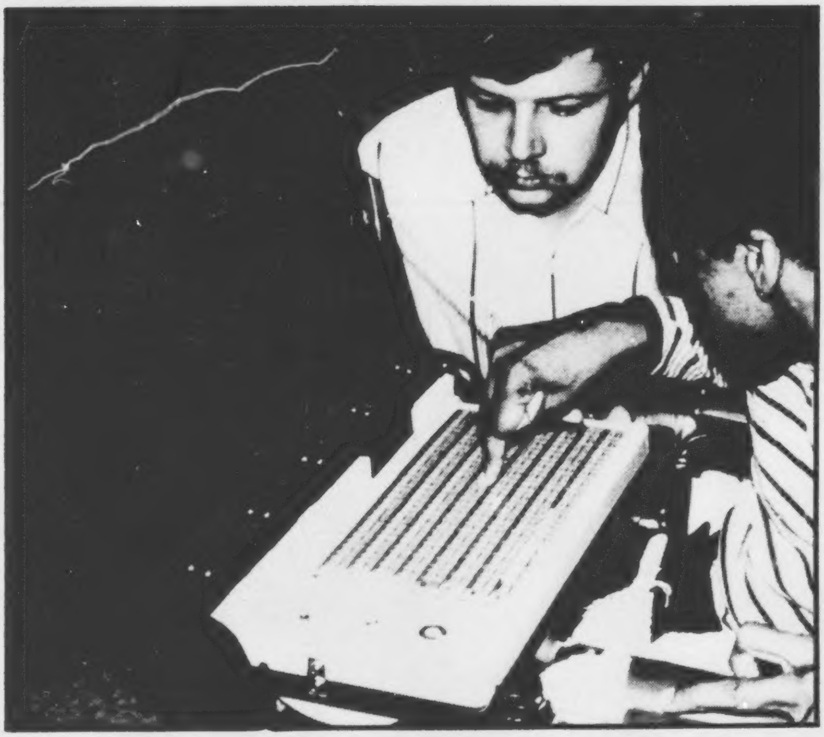
Prentke Romich Company develops, manufactures and markets electronic aids for the severely handicapped serving two general population groups, people who are non-verbal and people who are nearly totally paralyzed. The devices make use of the individual's capabilities and provide functions to enhance communication and daily living tasks relating to educational, vocational and recreational pursuits.

Electronic communication aids permit non-verbal persons to express themselves. These devices may use pictures, symbols, letters, words, or sentences. They may simply light a lamp or they may print characters on a paper or video display. Many of the aids can be used as data entry terminals for connection to a computer.

Environmental control systems permit persons who are nearly totally paralyzed to operate various electrical devices in their surroundings. This can include answering and dialing the telephone, controlling television, radio, intercom, etc. and operating specially designed or adapted equipment.

(Information provided by Barry Romich, Prentke Romich Co.)

LAP TRAY, DETACHABLE, WHICH CONTAINS AN ELECTRONIC TALKING COMMUNICATOR



Photographs courtesy
of David F. Law, Jr.

LAP TRAY, DETACHABLE, WHICH CONTAINS AN ELECTRONIC TALKING COMMUNICATOR

DEVELOPER

Woodrow Wilson Rehab. Ctr.
Rehab. Engineering Dept.
Fishersville, VA 22939
(703) 885-9724

CONTACT PERSON

David F. Law, Jr.
Woodrow Wilson Rehab. Ctr.
Rehab. Engineering Dept.
Fishersville, VA 22939
(703) 885-9724

WHERE IT IS USED

Communicating

PROBLEM(S) IT OVERCOMES

inconvenience of transporting electronic communicators

FIELD TESTED

yes

Woodrow Wilson Rehabilitation Center and home

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

no

HOW IT WORKS

A hinged vacuum-formed plastic housing was designed to clamp to the desk-type arms of a wheelchair. By lifting the lap tray, the individual immediately has access to his talking communicator, yet it is neatly concealed when not in use. The wheelchair carrying case for Handi-Voice^{TM} communicator, (p.178), also provides a working surface for the individual.

(Information provided by David F. Law, Jr.)

LIGHT SIGNAL DEVICF FOR THE HEARING IMPAIRED

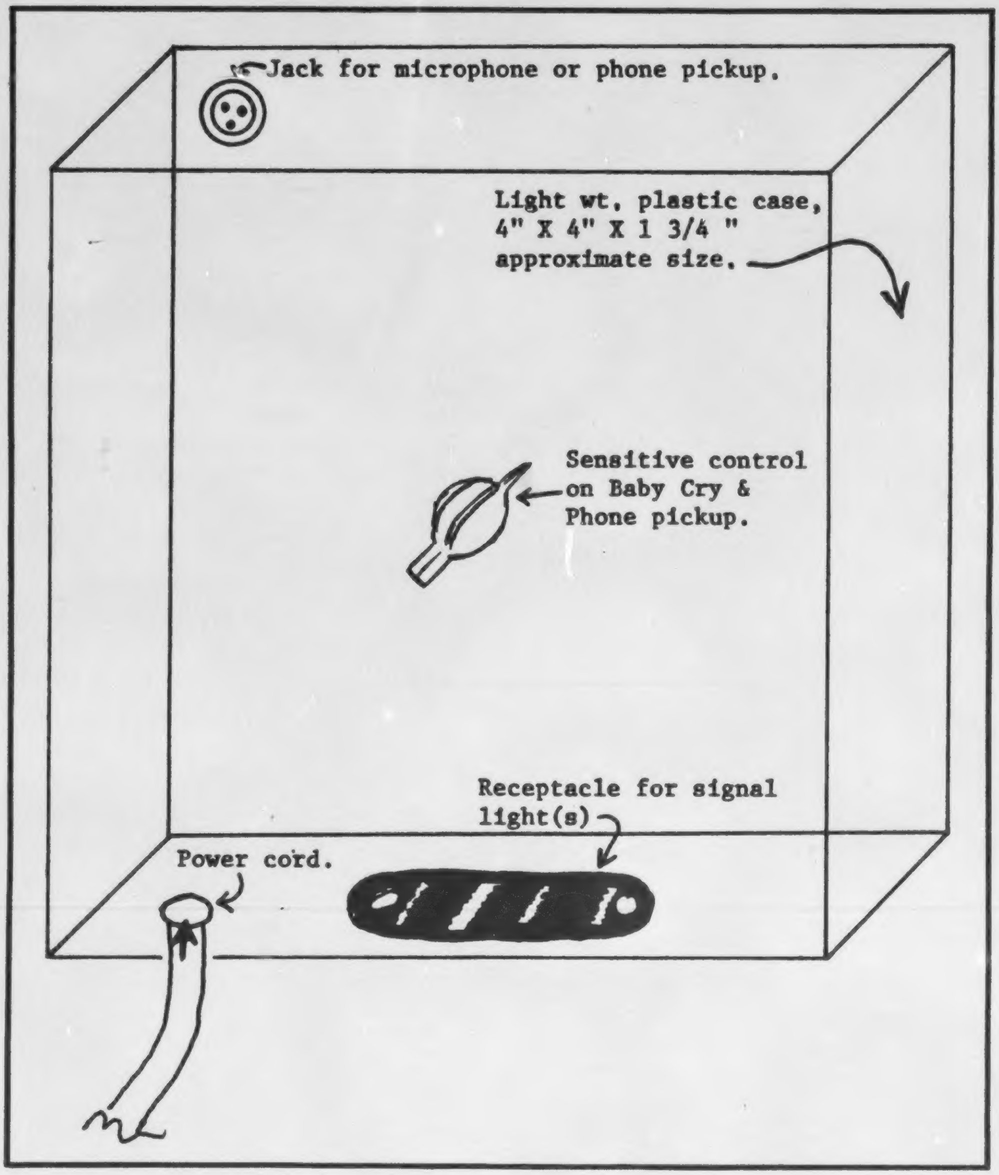

Jack for microphone or phone pickup.
Light wt, plastic case, 4" X 4" X 1 3/4 " approximate size.
Sensitive control on Baby Cry & Phone pickup.
Receptacle for signal light(s)
Power cord.

Diagram courtesy of KE
Notifier Series, redrawn
by Terri Bleck, WVSC

LIGHT SIGNAL DEVICES FOR THE HEARING IMPAIRED

DEVELOPER

Kenneth H. Dirks
2801 Berry Street
Sioux City, IA 51103
(712) 255-6642

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communication

PROBLEM(S) IT OVERCOMES

hearing impairment

FIELD TESTED

yes

in use for several years

REGULATORY APPROVAL

HEW

WARRANTY PROVIDED

yes

FOR SALE

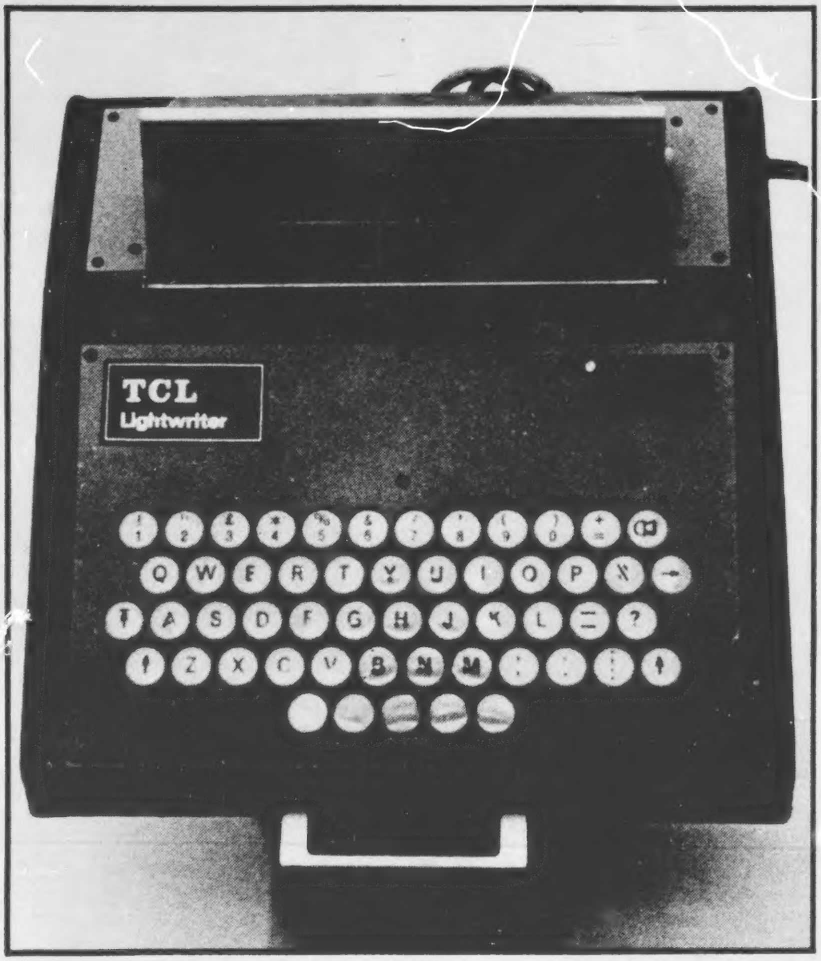
The KE Notifier Series
Devices for the Hearing Impaired
2801 Berry Street
Sioux City, IA 51103

HOW IT WORKS

The drawing on the opposite page is of a typical device from the KE Notifier Series. For the hearing impaired and others needing a light signaling device, there are several units to serve various needs: The Baby Cry Sound Pickup, the Telephone Magnetic Pickup, the Door Bell Pickup, the Sick Room Call, the Heat Sensor Fire Alarm, and the Snap On Phone Amplifier.

(Information provided by Kenneth H. Dirks.)

LIGHTWRITER


TCL
Lightwriter

Photograph courtesy of
Toby Churchill, Ltd.

LIGHTWRITER

DEVELOPER

Toby Churchill, Ltd.
20 Panton Street
Cambridge CB2 1HP
England

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communication

PROBLEM(S) IT OVERCOMES

difficulty in communication experienced by persons who are unable to speak

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Toby Churchill, Ltd.
20 Panton Street
Cambridge CB2 1HP
England

HOW IT WORKS

The Lightwriter is a portable unit consisting of a keyboard and luminous display. As the keys are depressed, characters enter the right-hand end of the display, moving those previously entered to the left, in the manner of a moving newsstrip. Corrections may be made by using the Backspace or Erase keys.

The keyboard uses the familiar typewriter layout, with a full range of letters, numerals and punctuation. It consists of a key-guard over a slash-proof membrane, allowing error-free operation for users with poor muscular control.

The display is removable, for placing either way around in the base unit, or standing separately on any convenient surface. It is secured by a simple latch mechanism, which can be operated by one hand. The display shows the last 32 characters entered, so that long phrases remain visible, giving ease of reading even where there are distractions.

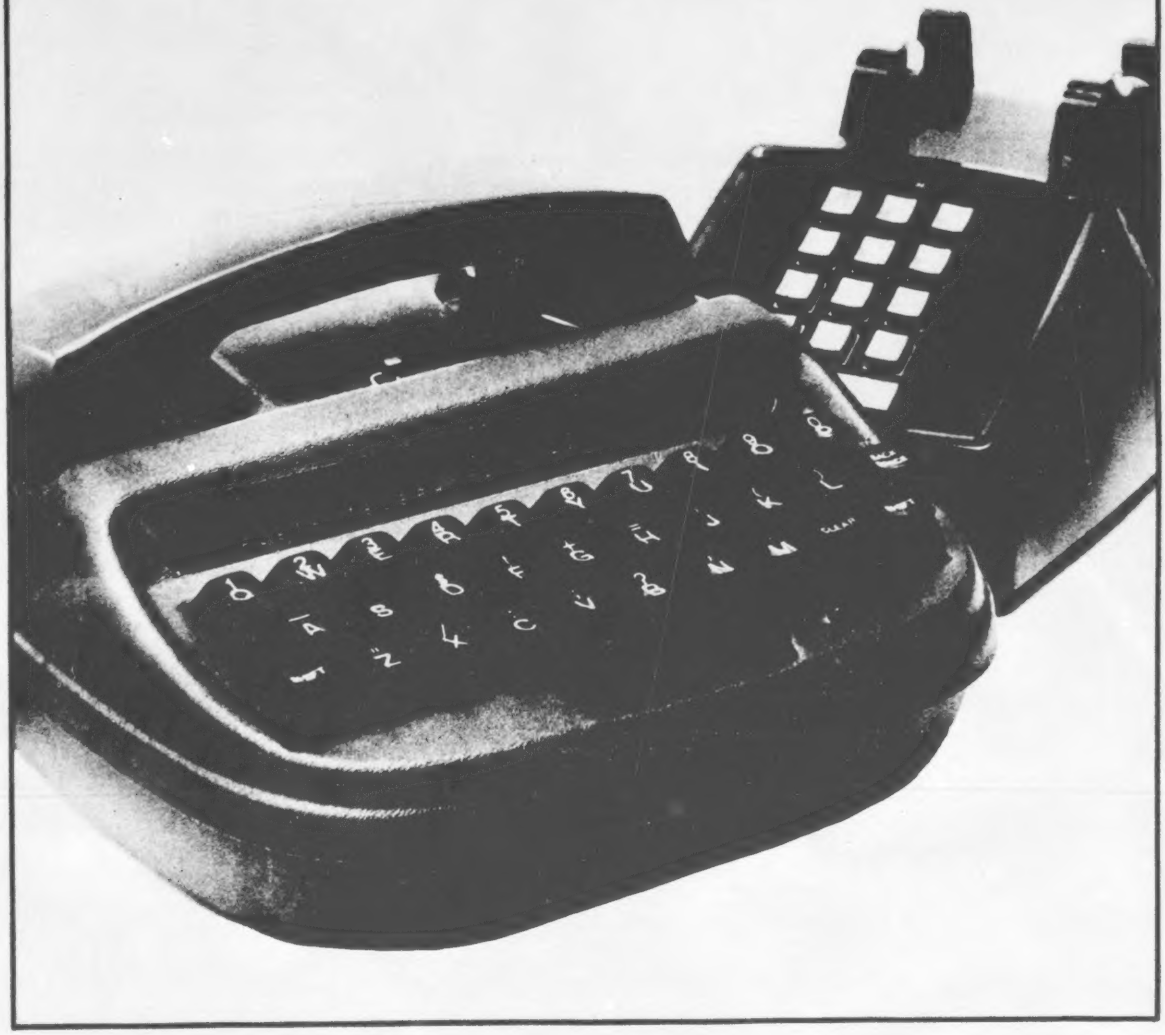
Options include: 1) 16-character-display, character height 15 mm., 2) keyboards in French, German, Italian, Scandinavian or Spanish layouts. For those with no typing experience, there is also an alphabetic layout.

Further options are under development. These include standard typewriter-style keys, and a communications unit allowing two lightwriters to be used in conversational mode.

(Information based on company literature.)

MANUAL COMMUNICATIONS MODULE (MCM/D)

MANUAL COMMUNICATIONS MODULE (MCM/D).



Photograph courtesy of
Wendy Eilers

MANUAL COMMUNICATIONS MODULE (MCM/D)

DEVELOPER

Micon Industries
252 Oak Street
Oakland, CA 94607
(415) 763-6033

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communication

PROBLEM(S) IT OVERCOMES

a deaf person's inability to use a regular phone to communicate with someone else who has deaf telecommunications equipment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Micon Industries
252 Oak Street
Oakland, CA 94607

$640.00

HOW IT WORKS

This is a portable communications device, size, 8" x 10" x 3", weight, 3.8 lbs.; battery powered, but includes an AC Adaptor/Recharger.

The display screen offers a 32-character read-out of both sides of the conversation. The words and symbols move across the display in an uninterrupted stream.

The MCM/D is compatible with all deaf telecommunications equipment. The built-in coupler/modem accepts all U.S. and Canadian handsets including the TrimLine and Princess telephones.

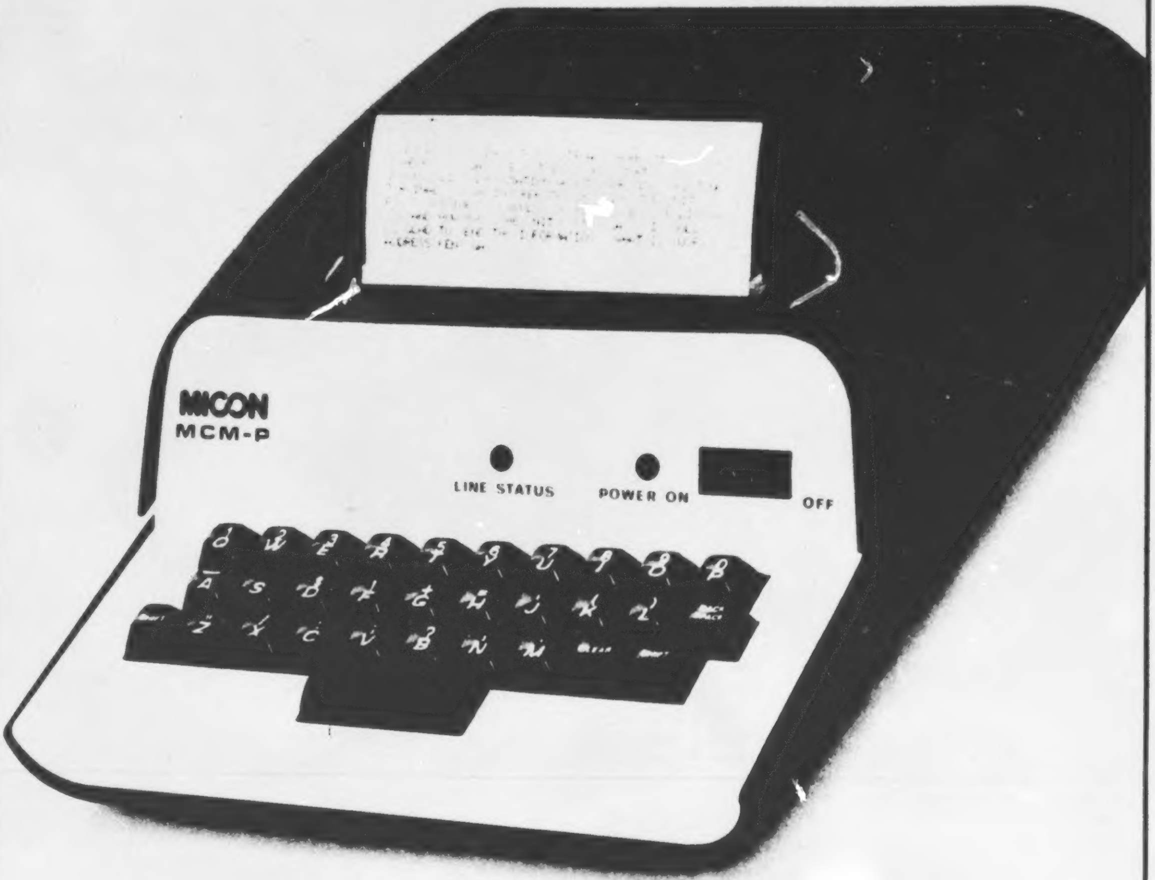
A plug on the side of the MCM/D terminal permits tape recording (for playback through the MCM/D) of conversations, or the prerecording of a message that is to be sent to many persons. To do this you must have the "Audio-Connector" accessory, and any audio-grade cassette recorder.

An L.E.D. lamp is located on the Power-Bright display window. It indicates the status of your call: dial tone present, telephone ringing, line or circuits busy. The "Power On" lamp will begin blinking On and Off about one-half hour prior to the charge in the Ni-Cad battery becoming exhausted and in need of recharging. This eliminates the possibility of untimely loss of messages.

(Information based on organization literature.)

MANUAL COMMUNICATIONS MODULE/PRINTER (MCM/P)

MANUAL COMMUNICATIONS MODULE/PRINTER (MCM/P)


MICON
MCM-P
LINE STATUS
POWER ON
OFF

Photograph courtesy of
Wendy Eilers

MANUAL COMMUNICATIONS MODULE/PRINTER (MCM/P)

DEVELOPER

Micon Industries
252 Oak Street
Oakland, CA 94607
(415) 763-6033

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communication

PROBLEM(S) IT OVERCOMES

a deaf person's inability to use regular phones to talk with other users of deaf telecommunication devices

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Micon Industries
252 Oak Street
Oakland, CA 94607

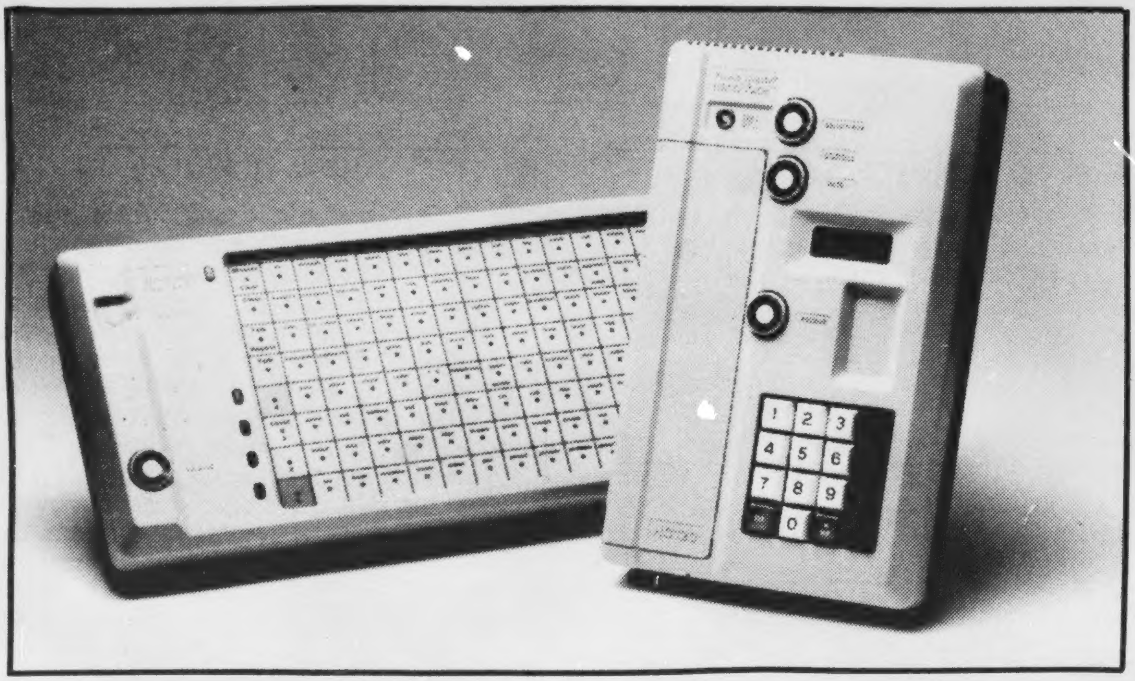
$695.00 - $795.00

HOW IT WORKS

The MCM/P Communications System represents the third generation product development of the Micon Communications Modules for the Deaf. It answers the need for full print-out capability without adding excessive size and weight to the module. It is available as either a battery-powered portable unit or a line-connected stationary module. It includes a standard typewriter keyboard, status signaling for dial tone, phone ringing and busy signaling, A.L.C. (Automatic Line Control) for carriage return and line feed to TTYs and fail-safe status lights. The portable version is powered by lightweight rechargeable Ni-Cad batteries and features a universal coupler that will accept all U.S. and Canadian handsets. The stationary version features an automatic answering capability that will send a 56 character message when owner is unable to answer the phone. But, most important is the continuous roll print-out capability of the MCM/P, which will accommodate a 60 WPM input on a ribbonless carriage. Each continuous roll of 5½" thermal paper can hold over 94,000 words. It provides a 60 WPM, 48 character-per-line printout capacity.

(Information based on company literature.)

PHONIC MIRROR^R HANDIVOICE^{TM}


1
2
3
4
5
6
7
8
9
0

Photograph courtesy of Votrax

PHONIC MIRROR^{R} HANDIVOICE^{TM}

DEVELOPER

Votrax Division
Federal Screw Works
500 Stephenson Hwy.
Troy, MI 48084
(313) 588-2050

CONTACT PERSON

Diane DeHaven
Votrax Division
Federal Screw Works
500 Stephenson Hwy.
Troy, MI 48084
(313) 588-2050

WHERE IT IS USED

Communicating

PROBLEM(S) IT OVERCOMES

no oral communication; used as a diagnostic educational or theraputic aid

FIELD TESTED

yes

throughout the U.S.

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

HC Electronics
250 Camino Alto
Mill Valley, CA 94941

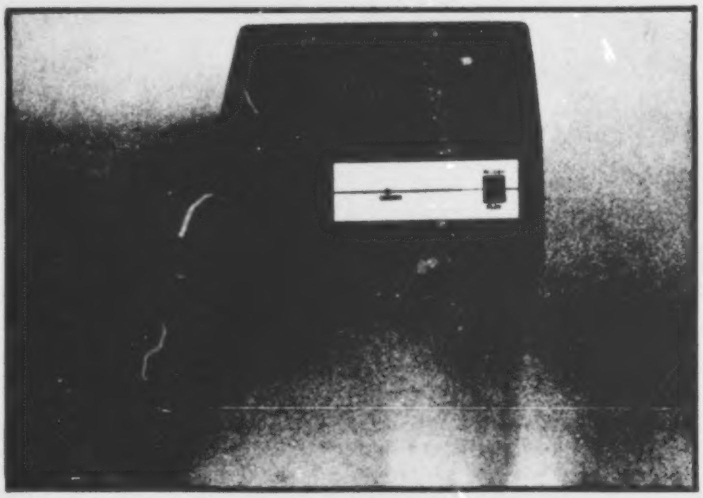
$2,195.00

HOW IT WORKS

HC-110 and HC-120 are hand held units which utilize a phoneme-based voice synthesizer to say any word in the English language. To operate the HC-110, the user touches the preprogrammed word, sound, or phrase, (written on an overlay placed on the display board), to be spoken. To use the HC-120 which operates similar to a calculator, the user presses the buttons for a 3-digit code for the vocabulary section. HC-120 can also be operated with an external switch. The external switches are: AT133 Sound Switch - activated by any sound e.g. grunting, tongue clicking, blowing. It has a steel headband and soft foam temple pads for stability and comfort. The headband and microphone are adjustable. AT134 Pedal Switch - activated by gross hand or foot movements. Provides good audible reinforcement and physical feel of the switch function. Requires less than 5 ounces of force applied to center of the large target area. AT160 Touch Switch - for use by people with extreme motor limitations. Activated by very light touch and small deflection. Deflection required can be adjusted. Can be screw-mounted for head or hand operation. AT161 Leaf Switch - for use by people with moderate limitations. Activated by chin, lateral arm movements or other movements of moderate control. Deflecting leaf in either direction activates switch.

(Information based on Votrax literature.)

RANDOM ACCESS TAPE RECORDER
(AUDIO MESSAGE PLAYBACK SYSTEM)



Photograph courtesy of
Biomedical Engineering
Center

RANDOM ACCESS TAPE RECORDER
(AUDIO MESSAGE PLAYBACK SYSTEM)

DEVELOPER

Biomedical Engin. Ctr.
Tufts-New England Medical
Center
171 Harrison Avenue
Box 1014
Boston, MA 02111
(617) 956-5036

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communicating

PROBLEM(S) IT OVERCOMES

inability to communicate verbally due to severe physical disabilities

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

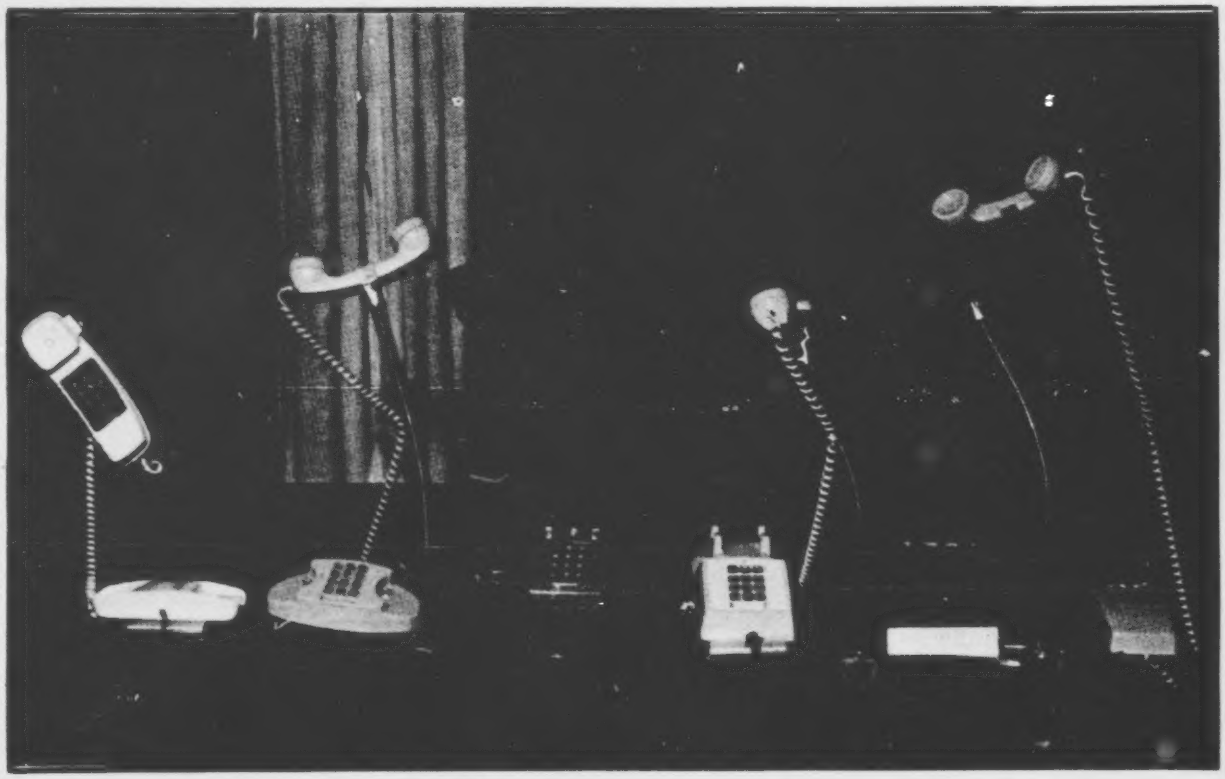
Contact developer for information about availability and price.

HOW IT WORKS

When used in conjunction with a Symbolic Tufts Interactive Communicator (SYMTIC) (p. 186) this specially designed tape recorder provides the user with 56 pre-recorded messages to select from. Each message is 8 seconds long and corresponds to a box on the SYMTIC.
To operate the audio message SYMTIC only one switch is required--either standard or specially adapted for the user. The selection of any box on the SYMTIC will cause that message to be played back.
To program messages onto the tape, all that is required is to place the mode switch into the "record" position, select the box that you wish to assign the message, wait for the "record" light to light, then speak the message.
This device utilizes a clear leader cassette tape available through many distributors. The machine is battery operated but may be operated on house current if a battery charger/illuminator is used.

(Information based on Biomedical Engineering Center literature.)

SPARR TELEPHONE ARMS



Photograph courtesy of
Leon Berger

SPARR TELEPHONE ARMS

DEVELOPER

Leon Berger
P.O. Box 143
Allamuchy, NJ 07820
(201) 852-6309

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Speaking on a telephone

PROBLEM(S) IT OVERCOMES

difficulty holding a telephone receiver

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Sparr Telephone Arm Company
P.O. Box 143
Allamuchy, NJ 07820

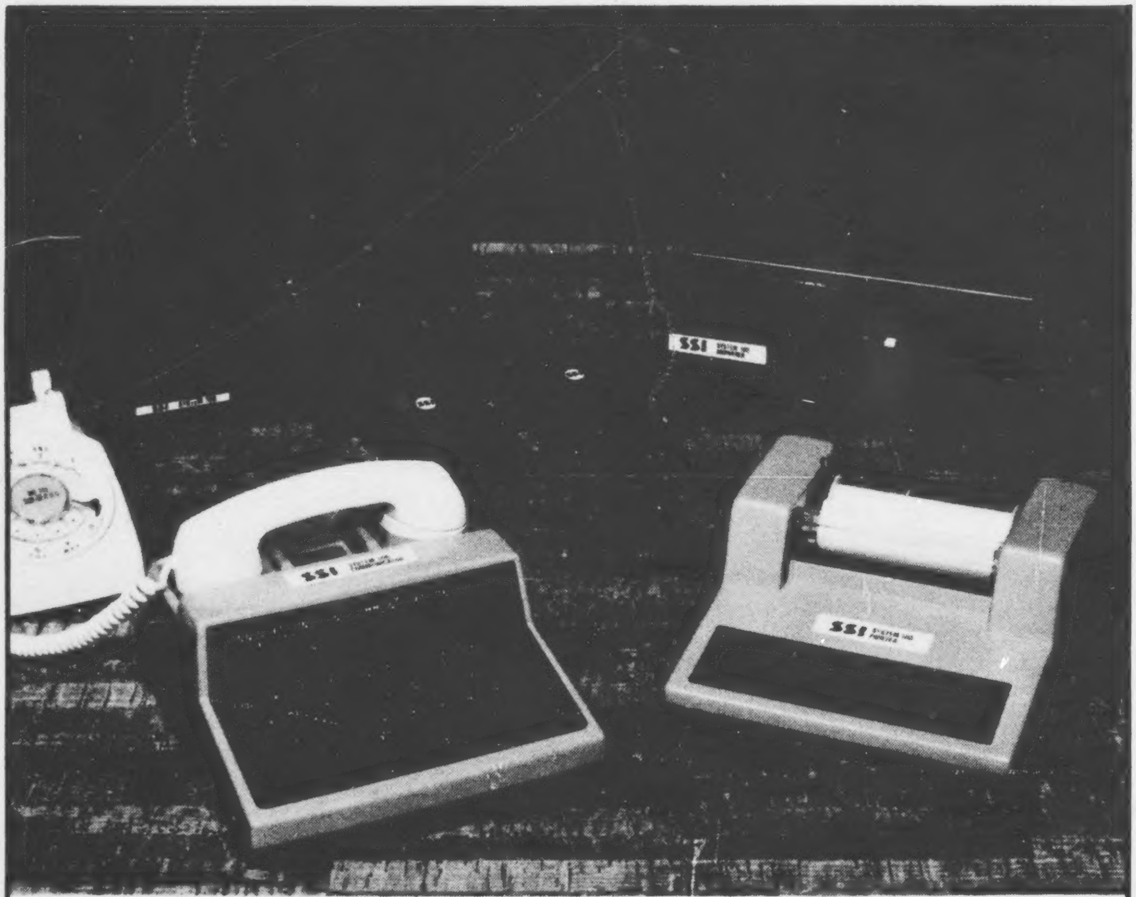
$25.00 plus postage

HOW IT WORKS

A heavy-duty steel and chrome flexible rod, in 20", 25" or 29" lengths is the arm. It clamps to the ledge of a desk or table. The telephone receiver is attached to the top of the unit. A multiple button telephone is answered by pressing the lighted button. When the conversation ends, pressing an unlighted button will clear the extension. For telephones with no buttons, a rod is placed across the top of the phone which engages the line when it is removed and opens the line when it is in place.

(Information based on Sparr literature.)

SSI SYSTEM 100 COMMUNICATOR AND TELECOMMUNICATION DEVICES



© Craig G. Stancliff 1979

Photograph courtesy of
Specialized Systems, Inc.

SSI SYSTEM 100 COMMUNICATOR AND TELECOMMUNICATION DEVICES

DEVELOPER

Specialized Systems, Inc.
11558 Sorrento Valley Rd.
Building 7
San Diego, CA 92121
(714) 481-6000

CONTACT PERSON

Jane Atkins, Sales Dir.
Specialized Systems, Inc.
11558 Sorrento Valley Rd.
San Diego, CA 92121
(714) 481-6000

WHERE IT IS USED

Communication
Health

PROBLEM(S) IT OVERCOMES

difficulty experienced by deaf persons and persons with speech impairments when trying to communicate by phone

FIELD TESTED

yes

REGULATORY APPROVAL

UL; FCC

WARRANTY PROVIDED

yes

FOR SALE

Specialized Systems, Inc.
11558 Sorrento Valley Road
Building 7
San Diego, CA 92121

Communicator $545, Printer $545, Answerer $399, Master Ring Signaler $45

HOW IT WORKS

Communicator (TDD/TTY)

A portable electronic "teletype". No connections or wiring required. To use, place the handset on top of the Communicator, dial the number of the other Communicator location you want to "talk" to, and begin your two way typed "conversation". As you type, your words travel across the electronic readout display. Simultaneously, the words are transmitted through the telephone to the other Communicator (TDD/TTY).

Printer

A 48 character per line, thermal printer that attaches to the Communicator. The Printer generates a permanent record of both sides of the conversation on a 5¼" continuous paper roll.

The Printer has a built-in 125 word memory capacity so that you can pretype your message into the Communicator and Printer, store it in the Printer, and send it automatically over the telephone during a call.

Answerer

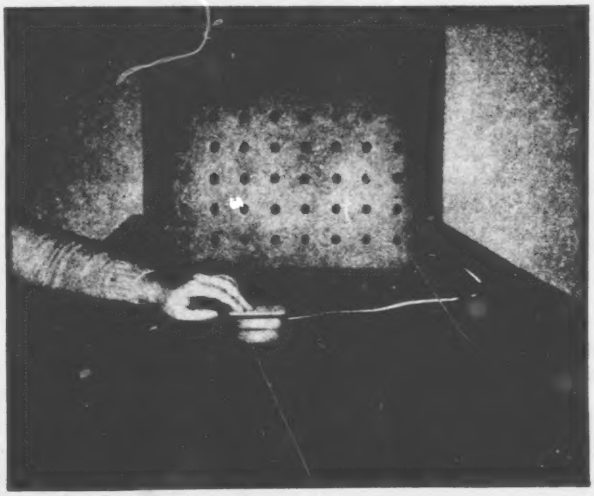
The Answerer works by itself to send your outgoing message and to record your incoming messages. You may change your outgoing message whenever necessary. The Answerer may also be used to record any conversation or message on a standard cassette tape.

Accessories

Ring Signalers - Works with any lamp to let you know when the phone is ringing. To use, plug a lamp into the Signaler and connect to an AC wall outlet. When the phone rings - the lamp will flash.

(Information based on Specialized Systems, Inc. literature.)

SYMBOLIC TUFTS INTERACTIVE COMMUNICATOR (SYMTIC)



Photographs courtesy of
Biomedical Engineering
Center

SYMBOLIC TUFTS INTERACTIVE COMMUNICATOR (SYMTIC)

DEVELOPER

Biomedical Engin. Center
Tufts-New England Medical
Center
171 Harrison Avenue
Box 1014
Boston, MA 02111
(617) 956-5036

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communicating

PROBLEM(S) IT OVERCOMES

inability to communicate verbally due to severe physical disabilities

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

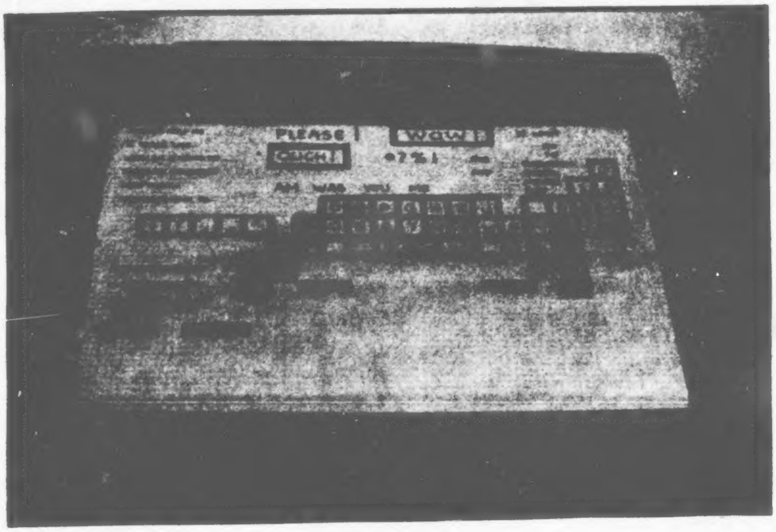
Contact developer for information about availability and price.

HOW IT WORKS

The SYMTIC is a 56 position scanning communicator and message selection device. It has been designed for those motorically impaired individuals who have at least one controlled muscular movement, but have not yet developed the spelling skills required to operate advanced communication devices.
A simple switch properly interfaced allows the user to operate the SYMTIC. Message selection is accomplished by observing the row-column scanning panel and then making two switch closures. The first allows the user to choose the desired row and the second choice allows the user to choose the column. A third switch closure returns the unit to normal scanning.
Messages, pictures, or phonetic symbols may be attached by clips, or complete overlaps interchanged as needed. The SYMTIC may be placed vertically on a table, used in a lapboard type situation, or hung on a wall. Battery operation makes the SYMTIC easily portable.

(Information based on Biomedical Engineering Center literature.)

TACTIC COMMUNICATOR


PLEASE
WOW!
OUCH!

Photograph courtesy of
Biomedical Engineering
Center

TACTIC COMMUNICATOR

DEVELOPER

Biomedical Engin. Center
Tufts-New England Medical Center
171 Harrison Avenue
Box 1014
Boston, MA 02111
(617) 956-5036

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communicating

PROBLEM(S) IT OVERCOMES

inability to communicate effectively due to severe physical disability

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Contact developer for information about availability and price.

HOW IT WORKS

The TACTIC is an electronic letterboard that allows almost the same flexibility as a paper word board. It utilizes the physical abilities of those nonverbal disabled individuals who are able to interact directly with a communication system either through residual pointing ability or the use of a head pointer.
The TACTIC uses a specially fabricated flat switch panel, 22" x 15", that contains 4,000 switch contacts. The typed output of this device is presented on two 20-character, single line displays. One faces the user, and the other faces the listener. A thermal printer can also record the typed output.
The operation of the TACTIC requires that the user be able to exert 6 ounces of force to close a switch contact.
The switch panel can be individually programmed to the user's physical and academic abilities.

(Information based on Biomedical Engineering Center literature.)

TALKING TELEPHONE DIRECTORY

Photograph not available

TALKING TELEPHONE DIRECTORY

DEVELOPER

Maryland Computer Services
502 Rock Spring Avenue
Bel Air, MD 21014
(301) 838-8888

CONTACT PERSON

Phyllis Barnes
Maryland Computer Services
502 Rock Spring Road
Bel Air, MD 21014
(301) 838-8888

WHERE IT IS USED

Information Operators

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

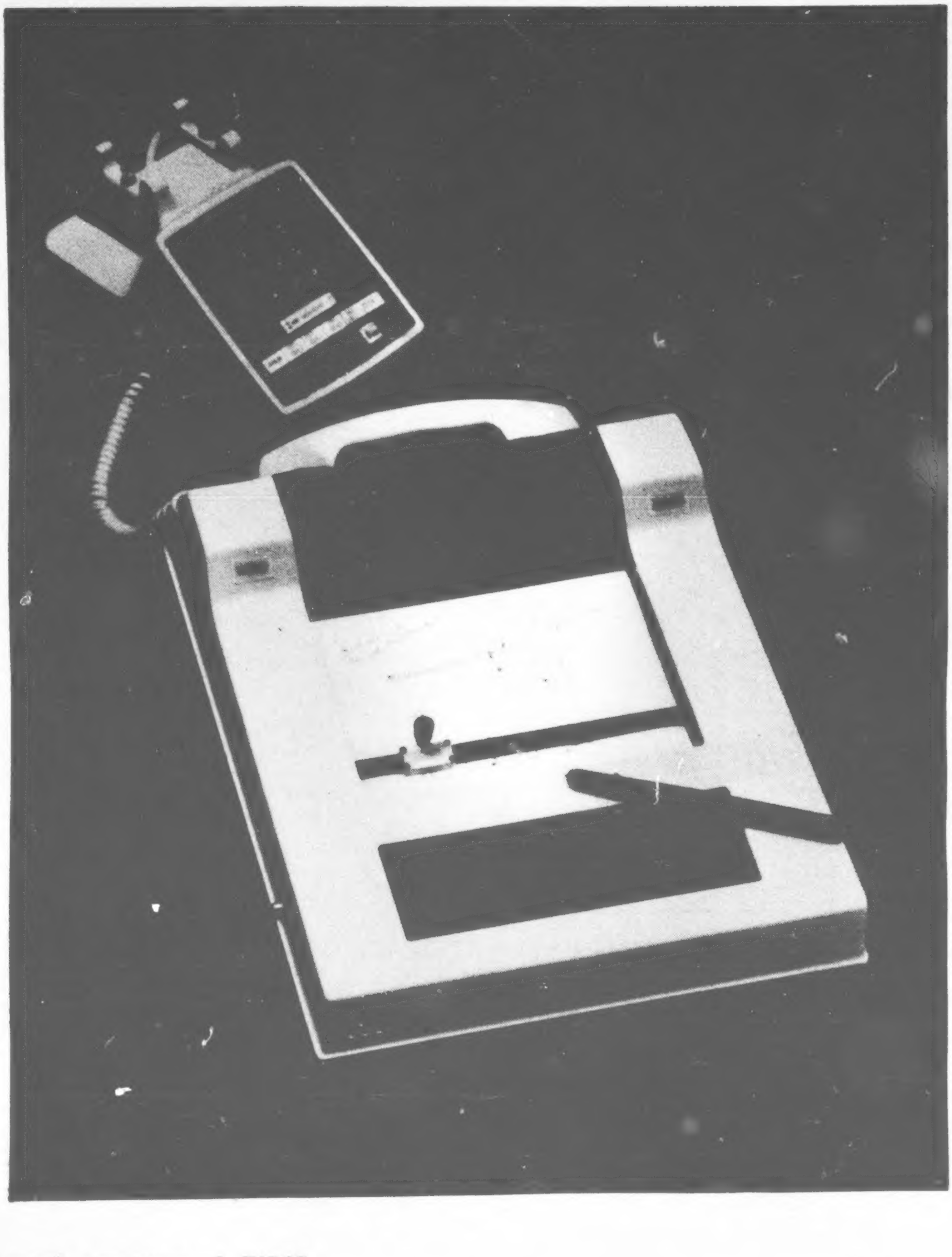
Maryland Computer Services
502 Rock Spring Avenue
Bel Air, MD 21014

HOW IT WORKS

TTD consists of a desk top computer with a typewriter style keyboard, a speech box with connecting cables, a visual display, a built-in paper tape printer and a tape cartridge or separate optional disk. When the user types in a name, the TTD responds vocally and visually with the corresponding information. If an entry is questioned, the machine vocally requests more information.

(Information based on Maryland Computer Services literature.)

TELENOTE



Photograph courtesy of TALOS
Systems, Inc.

TELENOTE

DEVELOPER

TALOS Systems, Inc.
7419 E. Helm Dr.
Scottsdale, AZ 85260
(602) 948-6540

CONTACT PERSON

Ron Groshelle
7419 E. Helm Dr.
Scottsdale, AZ 85260
(602) 948-6540

WHERE IT IS USED

Telephone communication

PROBLEM(S) IT OVERCOMES

hearing impairment; no oral communication

FIELD TESTED

yes

all over world

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

TALOS Systems, Inc.
7419 E. Helm Dr.
Scottsdale, AZ 85260

Price average $2500.00 - depending on options

HOW IT WORKS

Telenote is a voice graphic communication system which enables the user to transmit and receive information in a written form. As the user writes the information to be transmitted it is received at one or many receiving points. Information can be relayed orally along with the written communication.

(Information based on TALOS Systems, Inc. brochure.)

Photographs courtesy of
Arthur Heyer

TELEPHONE ADAPTER

DEVELOPER

Arthur Heyer
Juan-Antonio Heyer
Extensions for Independence
P.O. Box 3754
Downey, CA 90242

CONTACT PERSON

Arthur Heyer
Extensions for Independence
P.O. Box 3754
Downey, CA 90242
(213) 862-2704

WHERE IT IS USED

Communication

PROBLEM(S) IT OVERCOMES

difficulty in operating a phone independently

FIELD TESTED

yes

three years of personal use; presently used by over fifty other quadriplegics

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

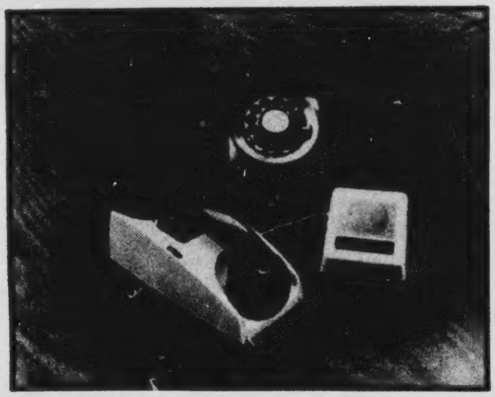
Extensions for Independence
P.O. Box 3754
Downey, CA 90242

$49.50

HOW IT WORKS

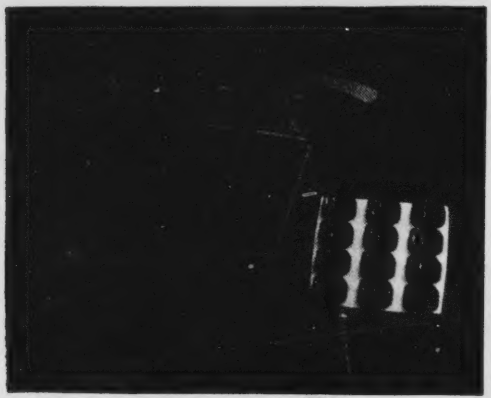
A gooseneck holder for the receiver, telephone and operating mechanism form a single unit which can be placed on a desk or easily moved around. The gooseneck and operating mechanism are firmly attached to a wooden platform. The platform is finished in woodgrain formica and is designed to accommodate a notebook on the side of the telephone. The unit can be easily arranged or rearranged for right or left-ear use. Any regular telephone or a speakerphone can fit into this system. The phone can be connected or "hung up" with a slight push from a mouthstick or hand.

(Information based on Extensions for Independence literature.)



The Telephone Amplifier

The Phone Holder
Hand Clip



Touchables™

Photographs courtesy of
Maddak, Inc.

TELEPHONE ATTACHMENTS

DEVELOPER

Manufactured by:
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

CONTACT PERSON

Fred M. Joslyn
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

WHERE IT IS USED

Communication

PROBLEM(S) IT OVERCOMES

hearing impairment; visual impairment; difficulty grasping and holding

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc.
Pequannock, NJ 07440

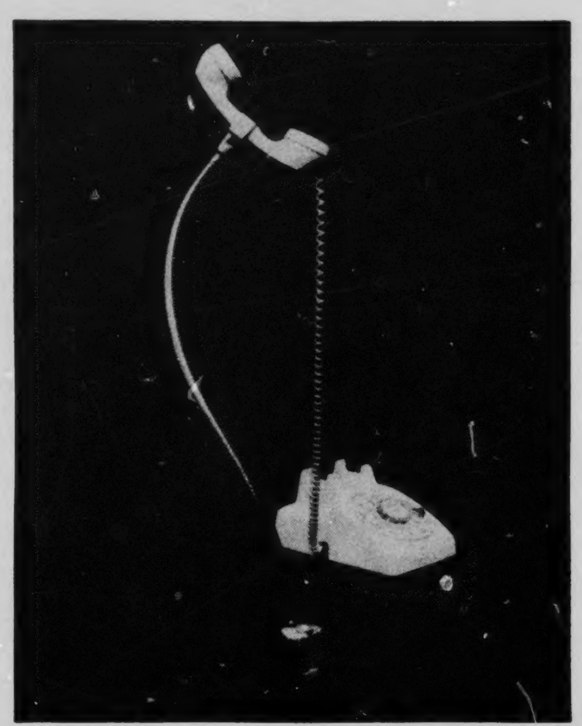
Telephone Amplifier	$25.80
Phone Holder Hand Clip	$ 4.85
Touchables™	$10.00

HOW IT WORKS

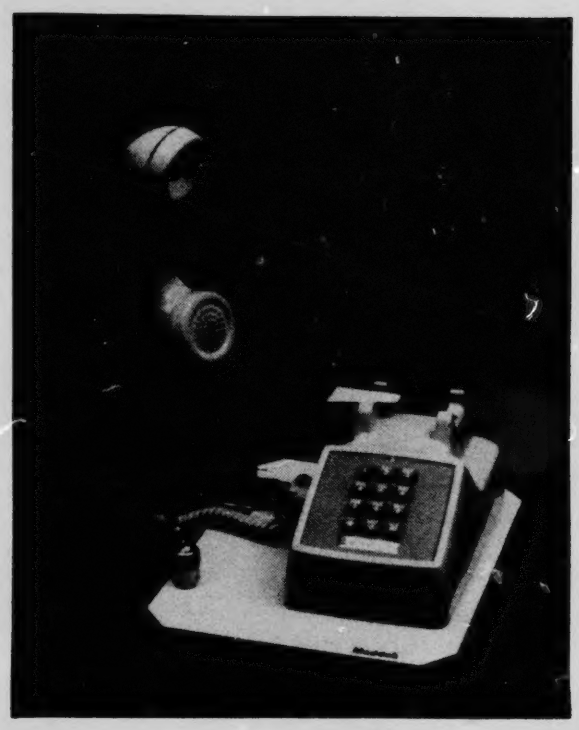
The Telephone Amplifier amplifies both incoming and outgoing voice signals. The hand set is dropped onto the cradle which then turns on the amplifier. A volume adjustment knob is located on the cradle. It is fully transistorized-9 volt battery included. The Phone Holder Hand Clip has velcro straps which wrap around the telephone hand set. This molded styrene spring action hand clip is useful for anyone who has difficulty in grasping and holding. Touchables™ is a plastic attachment which fits directly over the standard touch phone keyboard and immediately provides significantly enlarged keys and numbers. The new keyboard is attached to the telephone at four corners by adhesive pads, (supplied). The over sized numbers are a big help to those with reduced vision, and the larger buttons make it easier for those with reduced muscle coordination to avoid mistakes in dialing.

(Information based on Maddak Catalog No. 479, 1979.)

TELEPHONE EXTENSIONS



The Telephone Extension Arm



The Telephone Stand

Photographs courtesy of
Maddak, Inc.

TELEPHONE EXTENSIONS

DEVELOPER

Manufactured by:
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

CONTACT PERSON

Fred M. Joslyn
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

WHERE IT IS USED

Communication

PROBLEM(S) IT OVERCOMES

weakness of upper extremeties

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc.
Pequannock, NJ 07440

Telephone Extension Arm	$37.50
Telephone Stand	$65.00

HOW IT WORKS

The Telephone Extension Arm is a 29" long semi-rigid clamp-on carrier for the telephone hand set which permits use with free hands. The hand set may be left attached to the extension arm at all times. In use, the arm is always in a position to keep the hand set comfortably located for the user. When call is completed, a flat steel bar can be placed on the telephone cradle to cut off the signal (steel bar included). The Telephone Stand is a steel base on 4 rubber feet with an attached handset clamp and line interrupter.

(Information based on Maddak Catalog No. 479, 1979.)

TELE-TAC

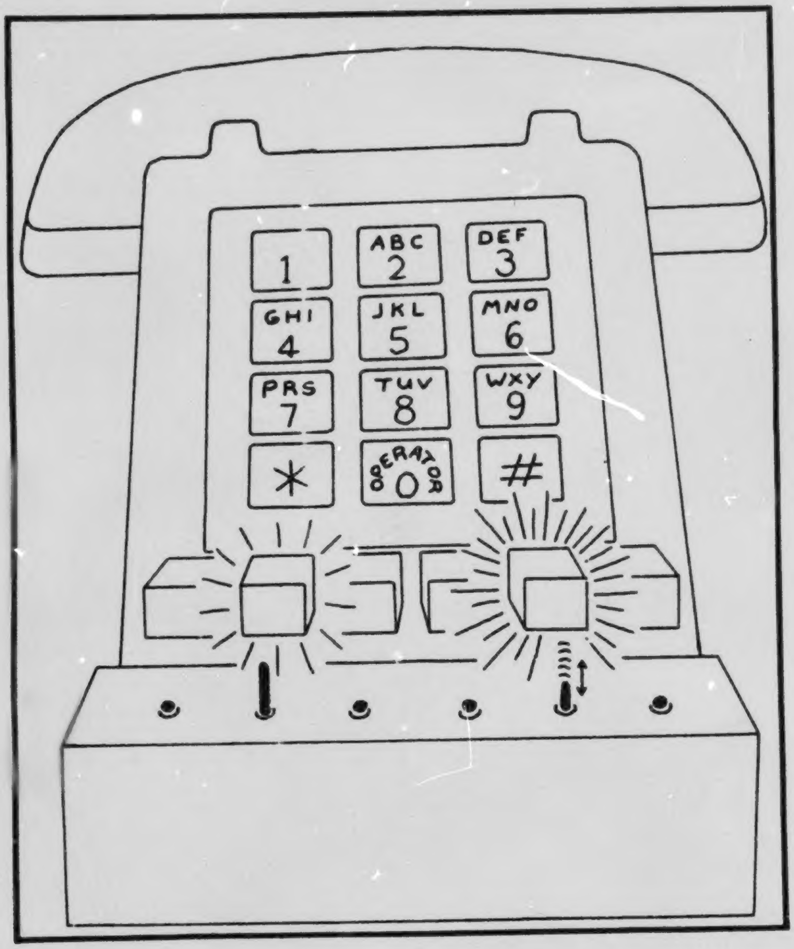

ABC
DEF
1
2
3
GHI
JKL
MNO
4
5
6
PRS
TUV
WXY
7
8
9
*
OPERATOR
0
#

Illustration courtesy of
Science for the Blind
Products

TELE-TAC

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind
Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

Anywhere telephones are used
Receptionist

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

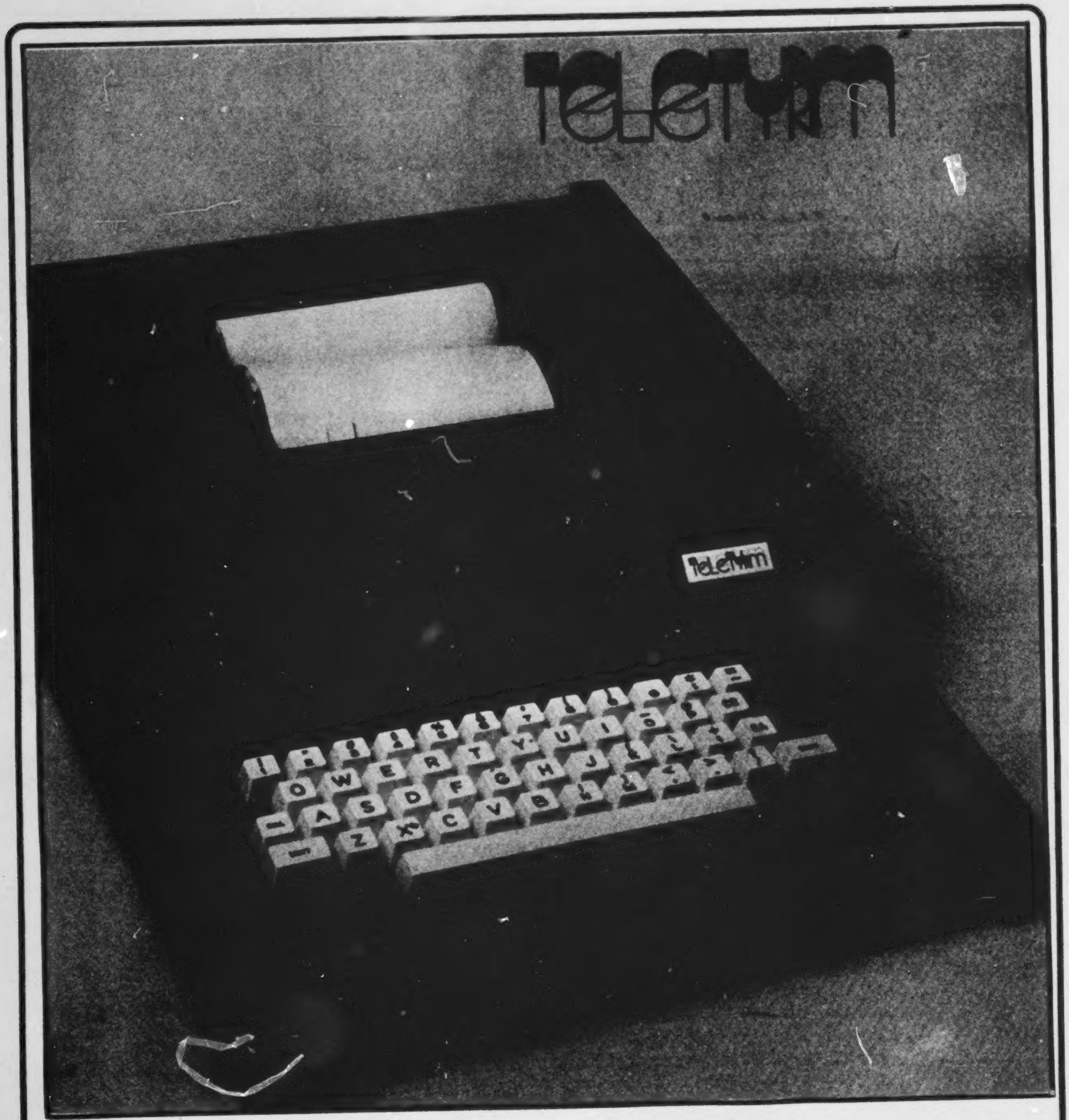
$195.00

HOW IT WORKS

The Tele-Tac is a tactile device for reading the lights on a multi-line telephone. A raised pin signals busy line; bouncing pin indicates line on hold; rising and falling pin signifies ringing line. It operates on a push-button or dial phone with five line buttons and one hold button. The phone is placed in the adjustable frame so that photo-cells look at the buttons. When a particular cell sees a light, its corresponding pin, located directly in front of the button, is activated. The phone can be handled quickly, quietly and efficiently by a totally blind person with little or no special training.

(Information based on Science for the Blind literature.)

TELETRYM


TELETRYM
TeleTrym

Photograph courtesy of
Wendy Eilers

TELETRYM

DEVELOPER

Teletrym Corp.
A Subsidiary of Micon Ind.
252 Oak Street
Oakland, CA 94607
(415) 763-6033

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communication

PROBLEM(S) IT OVERCOMES

a deaf person's inability to communicate verbally on the phone

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Micon Industries
252 Oak Street
Oakland, CA 94607

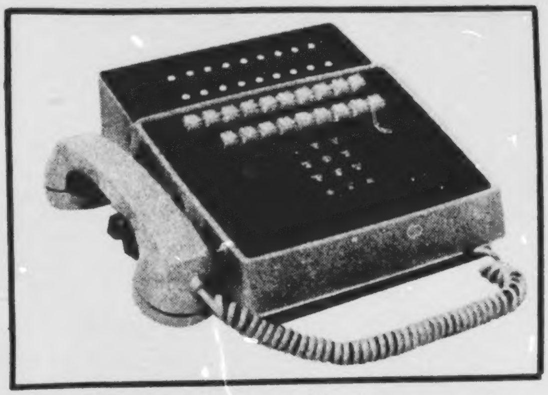
$995.00

HOW IT WORKS

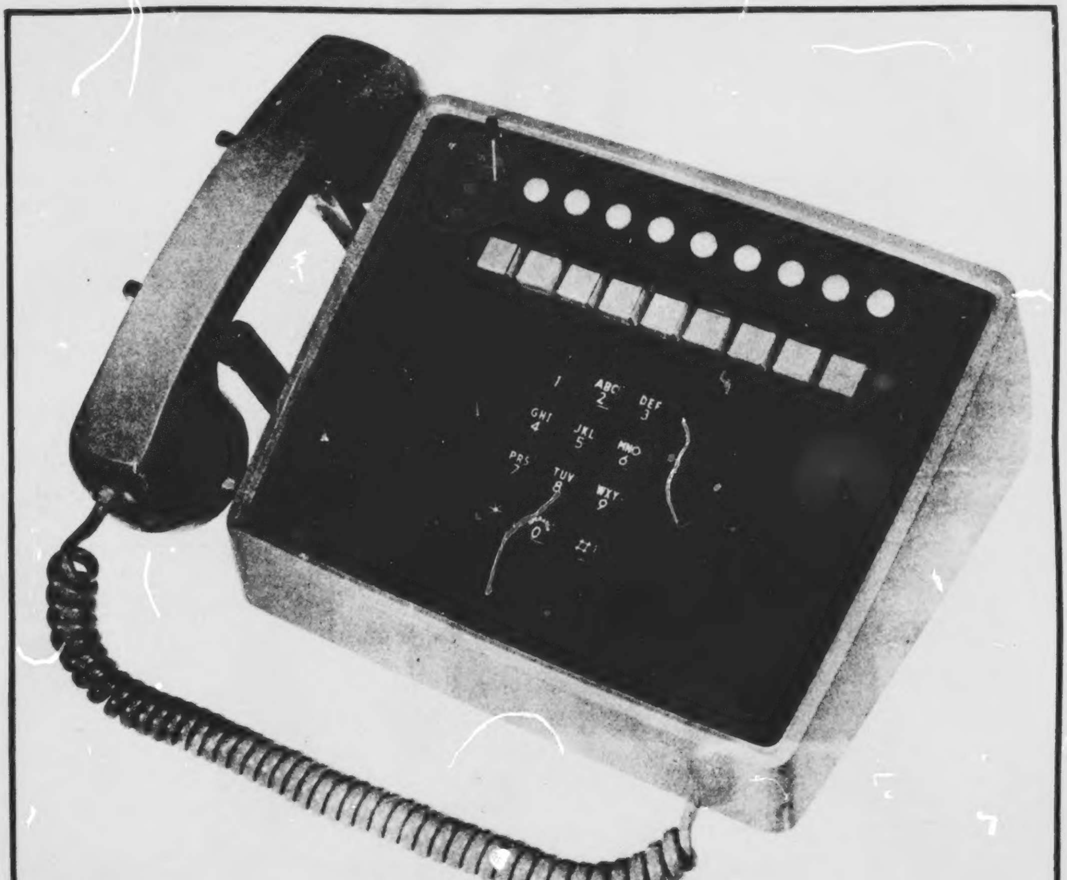
This machine is a totally automatic answering TTY. Its features include: HARD COPY ROLL PRINTER. This wide roll printer uses no ink and prints 48 characters on a line. It is easily read and is fully compatible with older machines. It shows the letter immediately after typing. BUILT-IN COUPLER. The Teletrym features the Hardwire Interconnect method of connecting to the telephone system. This method eliminates problems associated with accoustical cups. AUTOMATIC ANSWERING. When this feature is on, the Teletrym will automatically answer an incoming call and ask the caller to leave a message of any length. When finished, it automatically disconnects itself and waits for the next call. KEYBOARD DIALING. You dial your numbers through the Teletrym keyboard -- No need for a standard telephone. BUILT-IN RING DETECTOR AND RECEPTACLE. Automatically senses incoming call and signals through receptacle. A buzzer option is available for hearing users. RE-DIAL. If the number you call is busy or not at home, this feature will re-dial the same number at the touch of a button. The Teletrym is not a portable, but at 12"x15"x6" and weighing 12 lbs., it can be easily transported. It also features the Modular Plug, a Telephone Company standard, which can be simply installed.

(Information based on company literature.)

TOUCH FONE ADAPTOR



Twenty-button telephone


1
ABC 2
DEF 3
GHI 4
JKL 5
MNO 6
PRS 7
TUV 8
WXY 9
0

Ten-button telephone

Photographs courtesy of Telephonic Equipment

TOUCH FONE ADAPTOR

DEVELOPER

Telephonic Equipment
17401 Armstrong Avenue
Irvine, CA 92714
(714) 546-7900

CONTACT PERSON

Robert A. Carr
Telephonic Equipment
17401 Armstrong Avenue
Irvine, CA 92714
(714) 546-7900

WHERE IT IS USED

Monitoring telephone calls

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

C&P Telephone Company of West Virginia

REGULATORY APPROVAL

no

WARRANTY PROVIDED

yes

FOR SALE

See dealers list in appendix.

$215.00

HOW IT WORKS

Designed to mount in a TEC switch bracket or to replace the top row of switiches of a 20-button telephone, the switch assembly is 8"x3" consisting of nine operating buttons and an on and off switch which line up with the lines keys and hold button of a 10- or 20-button key telephone. To operate, the toggle handle is placed facing away from the user which turns on the switch. To determine individual line status, the user can run his or her fingertips across the switch assembly. If the Touch Fone button is in the Up position, that line is in use; if in the Down position, flush with face plate, that line is idle. For lines that are on Hold, the button will be up then will jump down briefly twice per second, corresponding to the "wink" of the Hold light. For lines that are Ringing, the button will move up and down steadly 1/2 second up, 1/2 second down, corresponding to the "flash" of the Ring light.

(Information based on Telephonic Equipment literature.)

TUFTS INTERACTIVE COMMUNICATOR

Photograph courtesy of
Biomedical Engineering
Center

TUFTS INTERACTIVE COMMUNICATOR

DEVELOPER

Biomedical Engin. Ctr.
Tufts-New England Medical Center
171 Harrison Avenue
Box 1014
Boston, MA 02111
(617) 956-5036

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communicating

PROBLEM(S) IT OVERCOMES

inability to communicate verbally due to severe physical disability

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Contact developer for information about availability and price.

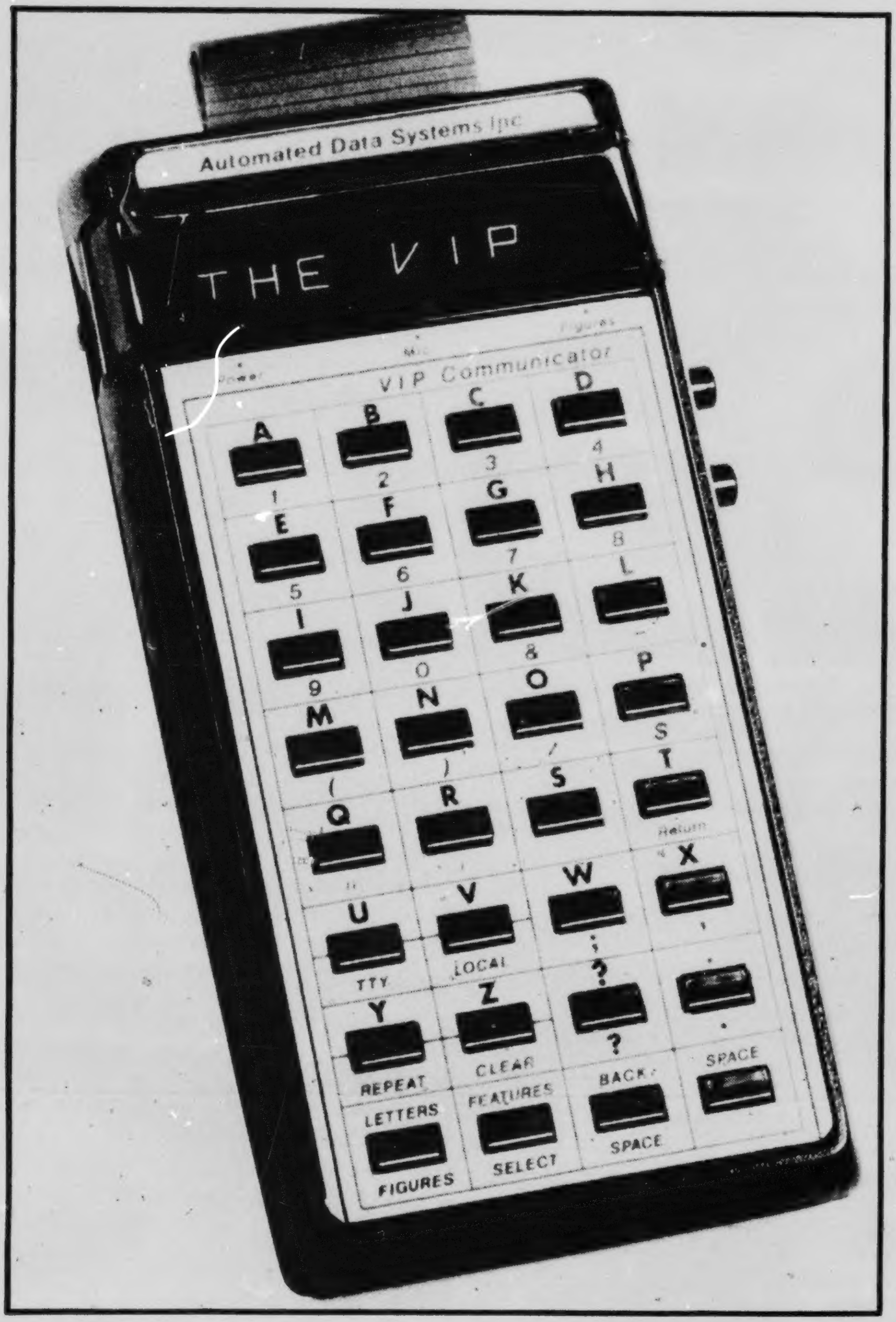
HOW IT WORKS

The electronically scanned keyboard of the Tufts Interactive Communicator (T.I.C.) can be activated and used by someone with only one controllable muscular movement; the user has complete access to all typewriter functions. The T.I.C. presents its typed output on both a 1000 character video display and a paper strip printer.

The visual keyboard consists of seven rows each containing eight characters. The unit automatically scans the keyboard from top to bottom, one row at a time. Selection of a row is indicated by a single activation of the input switch. The T.I.C. then scans the individual characters of the row. Selection of a particular letter or number is indicated by a second switch signal. The chosen character is then printed on the video screen to the left of the keyboard. The seventh row is reserved for controlling characters such as: backspace, line feed carriage return, erase, etc. The video screen can be edited to allow the user to make modifications to previously typed text. Once the user is satisfied, the "print" command causes the contents of the video screen to be copied onto a paper strip printer. An optional version of the machine allows the printer to operate simultaneously with the video screen.

(Information based on Biomedical Engineering Center literature.)

VIP COMMUNICATOR


Automated Data Systems Inc
THE VIP
Power
VIP Communicator
A
1
B
2
C
3
D
4
E
5
F
6
G
7
H
8
I
9
J
0
K
L
M
(
N
)
O
/
P
Q
R
S
T
Return
U
TTY
V
LOCAL
W
X
Y
REPEAT
Z
CLEAR
?
SPACE
LETTERS
FIGURES
FEATURES
SELECT
BACK
SPACE

Photograph courtesy of Sue Englke, ADS, Inc.

VIP COMMUNICATOR

DEVELOPER

Automated Data Systems, Inc.
P.O. Box 4062
Madison, WI 53711
(608) 273-0707 (Voice or TTY)

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communication

PROBLEM(S) IT OVERCOMES

difficulty experienced by deaf persons in communicating by phone

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Automated Data Systems, Inc.
P.O. Box 4062
Madison, WI 53711

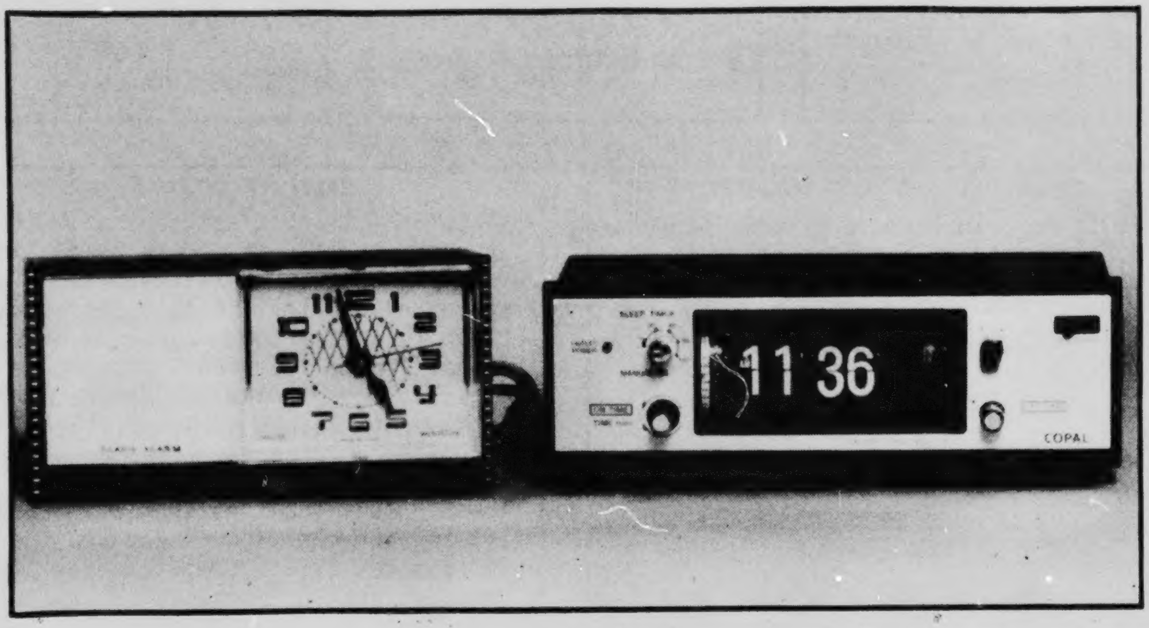
VIP: $179.00 + shipping
Talking Pocket: $79.00

HOW IT WORKS

Features - The VIP weighs 9 oz. It has an automatic carriage-return and line-feed for use with printing TTYs, a backspace key, a light to tell you when there is a dial tone, ringing, or busy signal on the telephone, a clear key for clearing the display, a "memory" that lets you backspace up to 45 characters to review a message. Because question marks and periods are used so often, the VIP lets you type them without needing to type the figures key and then the letters key (VIP's computer does it for you). Emergency messages of up to 45 characters may be entered in VIP's memory. By pressing the features and then the repeat keys, the message will be sent over and over. This lets you attend to the emergency while the person receiving your call can get help. Option - The Talking Pocket. This device is used to "talk" with other people face to face. The Talking Pocket may be worn on your shirt pocket, blouse, or lapel. When words are typed on the VIP, they appear on the Talking Pocket as well. The person you are "talking" to simply reads the words from your pocket. This is very useful when talking to hearing persons since they often do not understand sign language. The VIP comes complete with rechargeable batteries, AC adapter, telephone connectors, carrying case, and instruction booklet. The optional Talking Pocket may be ordered separately.

(Information based on company literature.)

VISUAL ALARM CLOCK/SLEEP TIMER



Photograph courtesy of
Howard M. Haines

VISUAL ALARM CLOCK/SLEEP TIMER

DEVELOPER

Nationwide Flashing
Signals System
P.O. Box 6146
Silver Spring, MD 20906
(301) 593-2755

CONTACT PERSON

Howard M. Haines
Nationwide Flashing
Signals System
P.O. Box 6146
Silver Spring, MD 20906
(301) 593-2755

WHERE IT IS USED

Home Economics
Homemaking
Office Occupations

PROBLEM(S) IT OVERCOMES

inability to hear a conventional alarm clock or timer

FIELD TESTED

yes

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

Nationwide Flashing Signals Systems
P.O. Box 6146
Silver Spring, MD 20906

clock $32.00 timer $55.00

HOW IT WORKS

Each of these products is a separate piece of equipment. The clock will emit a flashing light signal or activate a mattress vibrator or lamp to awaken a hearing impaired person. The clock face is illuminated also. The sleep timer is a digital clock with a sleep timer. The alarm can be set up to use both a buzzer and a table lamp at the same time.

(Information based on Nationwide Flashing Signals System literature.)

COMPUTER PROCESSING

Cathode Ray Tube Viewing System . . . 214

Computer Flowchart Symbol Stamps . . 216

Computer Programmer Station Modification for Single Key Stroke Entry 218

CRT Tracking Guide 220

Embosser Model ISE-1 (The Interactive Strip Embosser) 222

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Large Letter Computer Print-Out . . . 226

Large Print Video Terminal (LPVT) . . 228

Mouthstick Operable Computer Printout Reader/Reviewer 230

The Orator Talking Terminal 232

Synthetic Speech Terminal 234

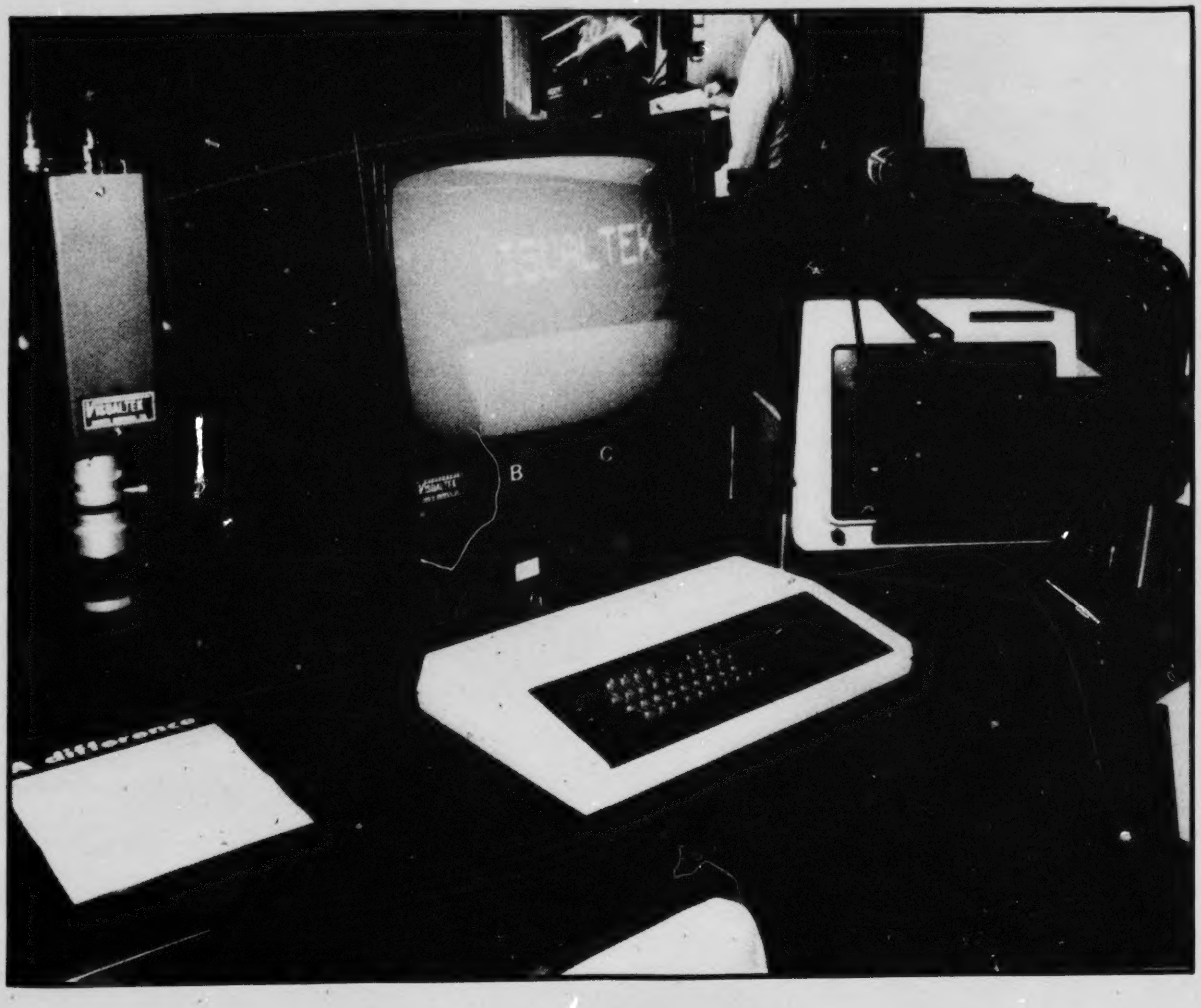
Talking Keypunch and Card Reader for the Visually-Handicapped 236

Total Talk Full Speech Computer Terminal 238

Typing and Computer Interface (TCI-1) 240

VS-6 and ML-I Voice Synthesizers . . 242

CATHODE RAY TUBE VIEWING SYSTEM


VISUALTEK
VISUALTEK
VISUALTEK
B
C
A difference

Photograph courtesy of
Visualtek

CATHODE RAY TUBE VIEWING SYSTEM

DEVELOPER

Visualtek
1610 26th Street
Santa Monica, CA 90404
(213) 829-6841

CONTACT PERSON

Hank Cunningham
1920 E. 87th Street
Bloomington, MN 55420
(612) 854-6098

or Marc Stenzel
Visualtek
(213) 829-6841

WHERE IT IS USED

Computer Programming
Data Entry
Information Retrival
Reading

PROBLEM(S) IT OVERCOMES

small character size of computer display

FIELD TESTED

yes

States of Minnesota, Illinois

REGULATORY APPROVAL

Department of Building and Safety - Los Angeles, CA

WARRANTY PROVIDED

yes

FOR SALE

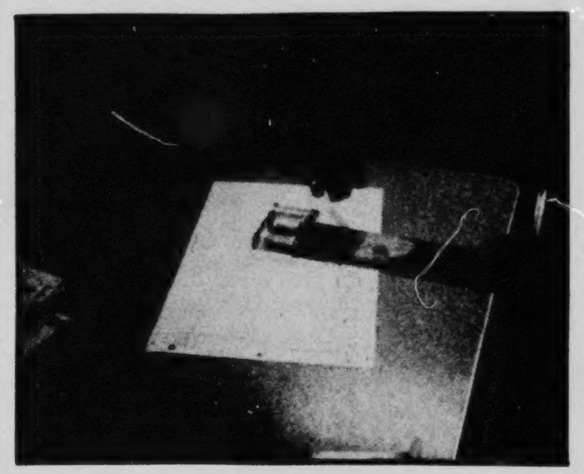
Visualtek
1610 26th Street
Santa Monica, CA 90404

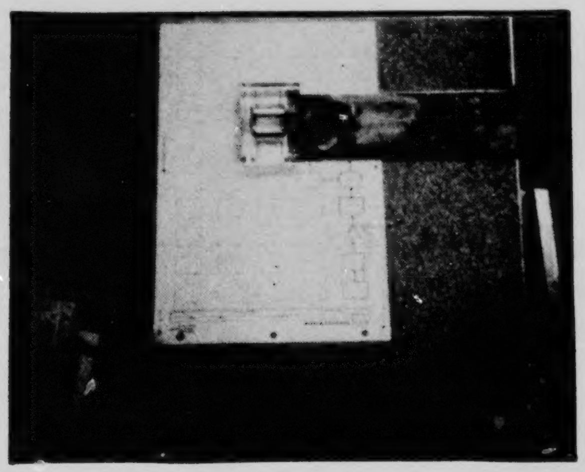
HOW IT WORKS

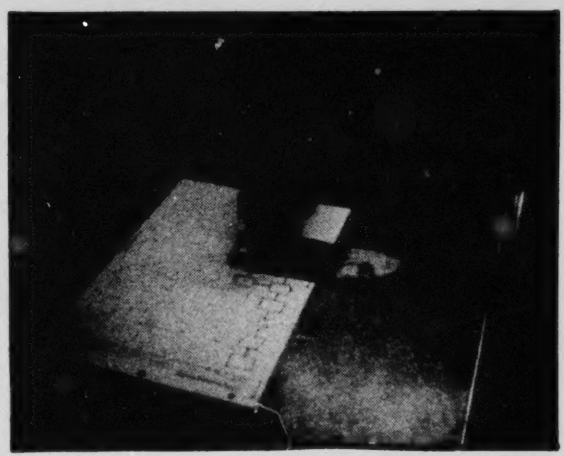
For use with computer terminals using a cathode ray tube (CRT), the viewing system (CVS) mounts above the display unit with support legs on either side and a mirror facing the front of the screen. This "retractable mirror assembly" can be slid out of the way for direct access to the CRT. Maximum magnification is approximately 20X with 2" high letters, maximum scanning area of the CRT display is 11" x 8.5". The unit was developed to enlarge characters of a CRT already providing sufficient brightness and contrast. By operating a control handle, user can line-scan horizontally and vertically. Horizontal travel is adjusted to reading material by margin stops, vertical position is maintained by friction brake.

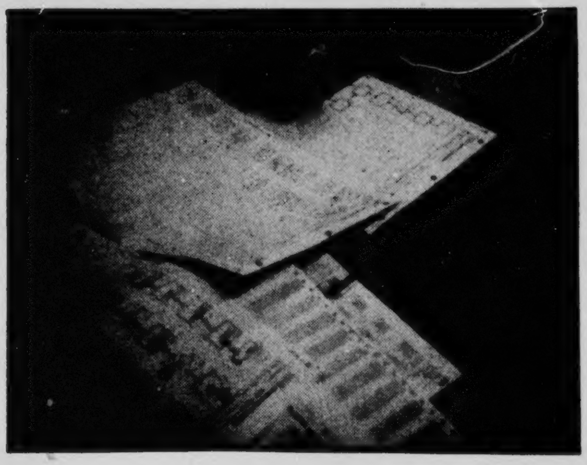
(Information based on Visualtek literature.)

COMPUTER FLOWCHART SYMBOL STAMPS









Photographs courtesy of
David F. Law, Jr.

COMPUTER FLOWCHART SYMBOL STAMPS

DEVELOPER

Woodrow Wilson Rehab. Ctr.
Rehab. Engineering Dept.
Fishersville, VA 22939
(703) 885-9724

CONTACT PERSON

David F. Law, Jr.
Woodrow Wilson Rehab. Ctr.
Rehab. Engineering Ctr.
Fishersville, VA 22939
(703) 885-9724

WHERE IT IS USED

Data Processing

PROBLEM(S) IT OVERCOMES

inability to use flowcharting stencils effectively

FIELD TESTED

yes

Woodrow Wilson Rehabilitation Center

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

no

HOW IT WORKS

Due to extreme spasticity, some individuals in Data Processing could not use flowcharting stencils to draw the symbols. All of the commonly used symbols were purchased on rubber stamps which are inserted in a Plexiglas guide plate once the individual has properly positioned the flowchart under it. Since the rectangular hole is machined with a slight shoulder around the bottom, the stamp automatically levels itself when inserted, thus eliminating smudges and errors resulting from stamp rocking.

(Information provided by David F. Law, Jr.)

COMPUTER PROGRAMMER STATION MODIFICATION FOR SINGLE KEY STROKE ENTRY

Photograph not available

COMPUTER PROGRAMMER STATION MODIFICATION FOR SINGLE KEY STROKE ENTRY

DEVELOPER

Clinical Convenience
Products
Contracting Serv. Div.
2070 Helena Street
Madison, WI 53704
(608) 251-2882

CONTACT PERSON

Don Warren
2070 Helena Street
Madison, WI 53704
(608) 251-2882

WHERE IT IS USED

Computer Programming

PROBLEM(S) IT OVERCOMES

inability to depress more than one key concurrently

FIELD TESTED

yes

individual's training and work environment

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Clinical Convenience Products
2070 Helena Street
Madison, WI 53704

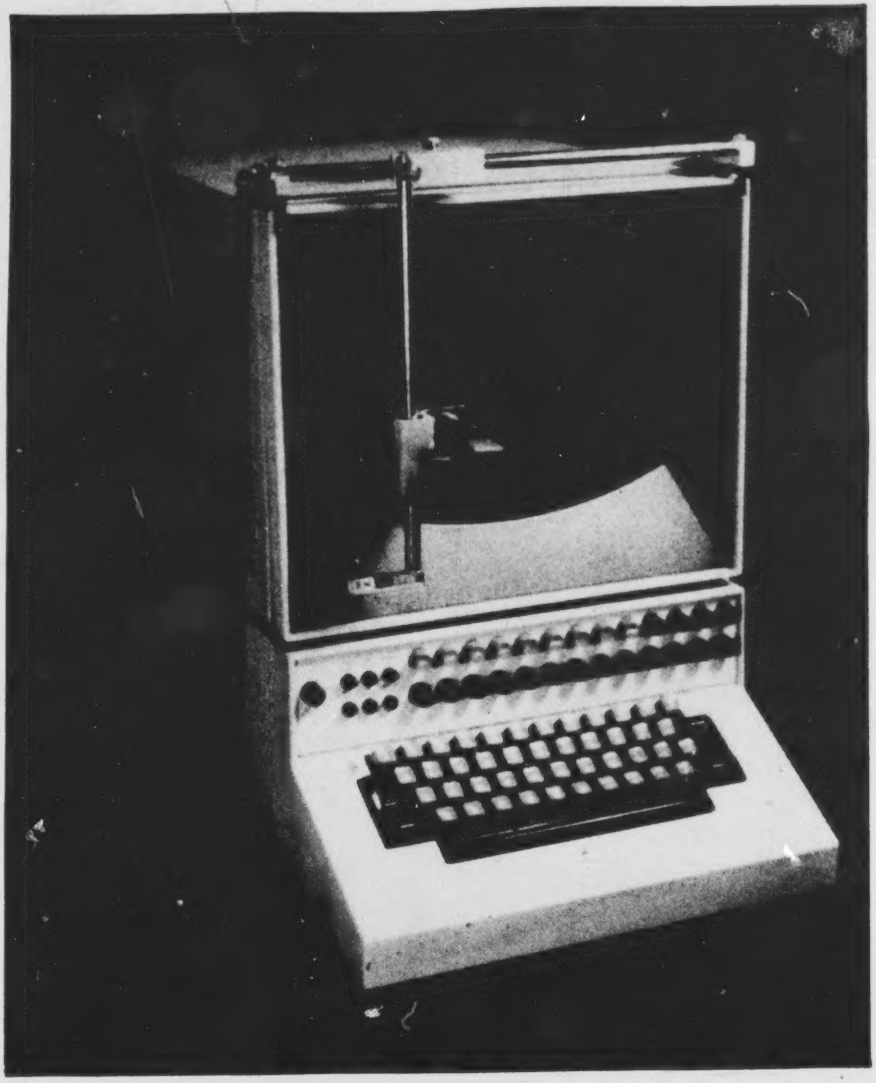
price range $85.00 to $400.00, dependent upon model

HOW IT WORKS

A computer system was modified to meet individual's unique problem of key entry. Individual is capable of single key stroke entry. Numerous central process unit functions require multiple concurrent key depressions. Central process unit terminal keyboard was modified to allow all control of the keyboard by single key stroke method. The custom keyboard cathode ray tube and central processing unit were interfaced with a printer.

(Information provided by Ricardo Cerna, Rehabilitation Engineering Specialist, Wisconsin Division of Vocational Rehabilitation, and Don Warren.)

CRT TRACKING GUIDE



Photograph courtesy of
Clement Laboratories

CRT TRACKING GUIDE

DEVELOPER

Clement Laboratories
2560 Wyandotte Street
Mt. View, CA 94043
(415) 964-0921

CONTACT PERSON

Ms. J. Klein
Clement Laboratories
2560 Wyandotte Street
Mt. View, CA 94043
(415) 964-0921

WHERE IT IS USED

Operating computer terminal

PROBLEM(S) IT OVERCOMES

arm fatigue, visual impairment

FIELD TESTED

yes

users in California and Arkansas

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

Clement Laboratories
2560 Wyandotte Street
Mt. View, CA 94043

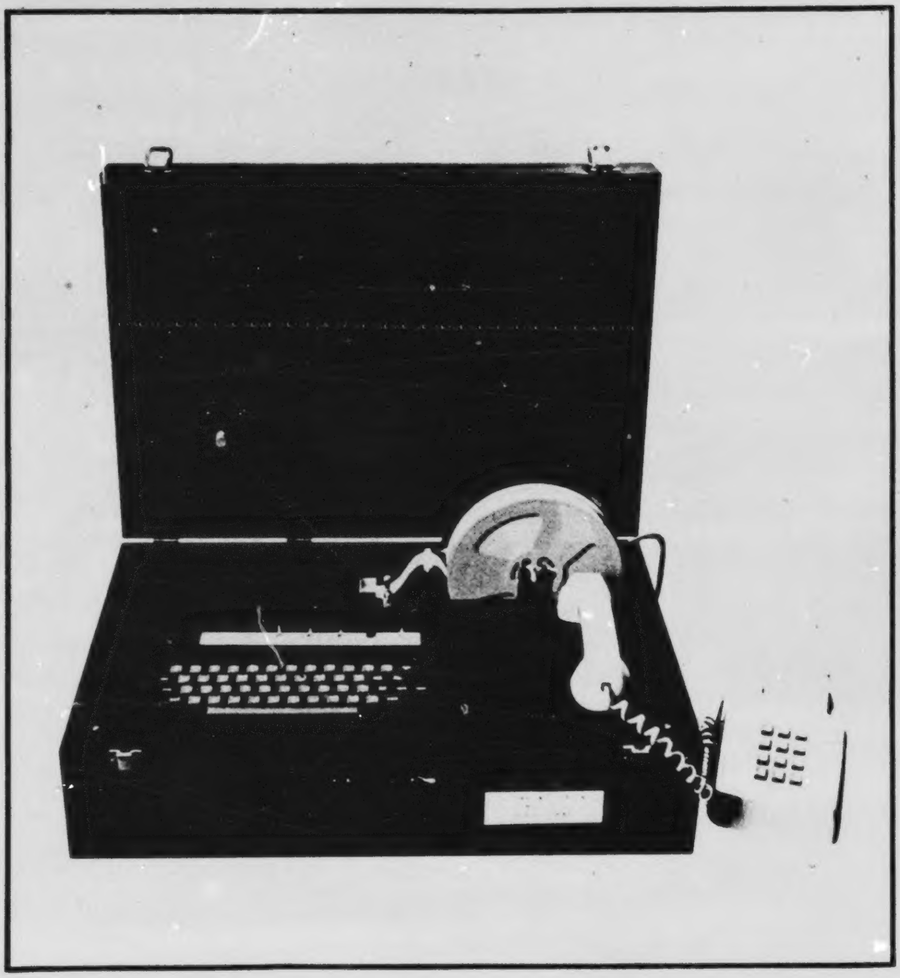
$550.00 plus $150.00 engineering fee if CRT housing is new to Clement

HOW IT WORKS

The Tracking Guide is made for use with an Optacon Camera, (see p. 566) equipped with a cathode ray tube, (CRT) Lens Module. It mounts on a data terminal or word processor CRT display. A user is able to follow lines or columns of alphanumeric characters across a CRT display. The camera can be left in place at any position on the screen when the user's hands are engaged in other tasks.

(Information based on Clement Laboratories information letters and report abstract.)

EMBOSSER MODEL ISE-1 (THE INTERACTIVE STRIP EMBOSSER)



Photograph courtesy of Triformation Systems

EMBOSSER MODEL ISE-1 (THE INTERACTIVE STRIP EMBOSSER)

DEVELOPER

Triformation Systems
3132 S.E. Jay Street
Stuart, FL 33494
(305) 283-4817

CONTACT PERSON

Guy Carbonneau, President
Triformation Systems
3132 S.E. Jay Street
Stuart, FL 33494
(305) 283-4817

WHERE IT IS USED

Used as an input or output station for data processing with an on-line computer system

PROBLEM(S) IT OVERCOMES

visual impairment; inability to read computer printout visually

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Triformation Systems
3132 S.E. Jay Street
Stuart, FL 33494

As of 1/1/80
$3,200.00

HOW IT WORKS

This braille computer terminal or Interactive Strip Embosser offers a communication device which embosses braille at ten characters per second on strip paper tape.

Using the ISE-1 standard keyboard, it is possible to request information from computers, or other data storage sources such as digital cassettes, and obtain braille responses in a matter of seconds. Several equipment, installation and training options are available.

(Information based on Triformation Systems product literature.)

I.B.M. CARD READER WITH TACTILE OR VOICE OUTPUT

Photograph courtesy of J.C. Swail

I.B.M. CARD READER WITH TACTILE OR VOICE OUTPUT

DEVELOPER

J.C. Swail
National Research Council
M-50
Dee R182 Montreal Road
Ottawa Ontario
Canada
K1A 0R8

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Computer Programming
Data Entry

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

Errol Hembroff-British Columbia, Canada
Computer Services

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

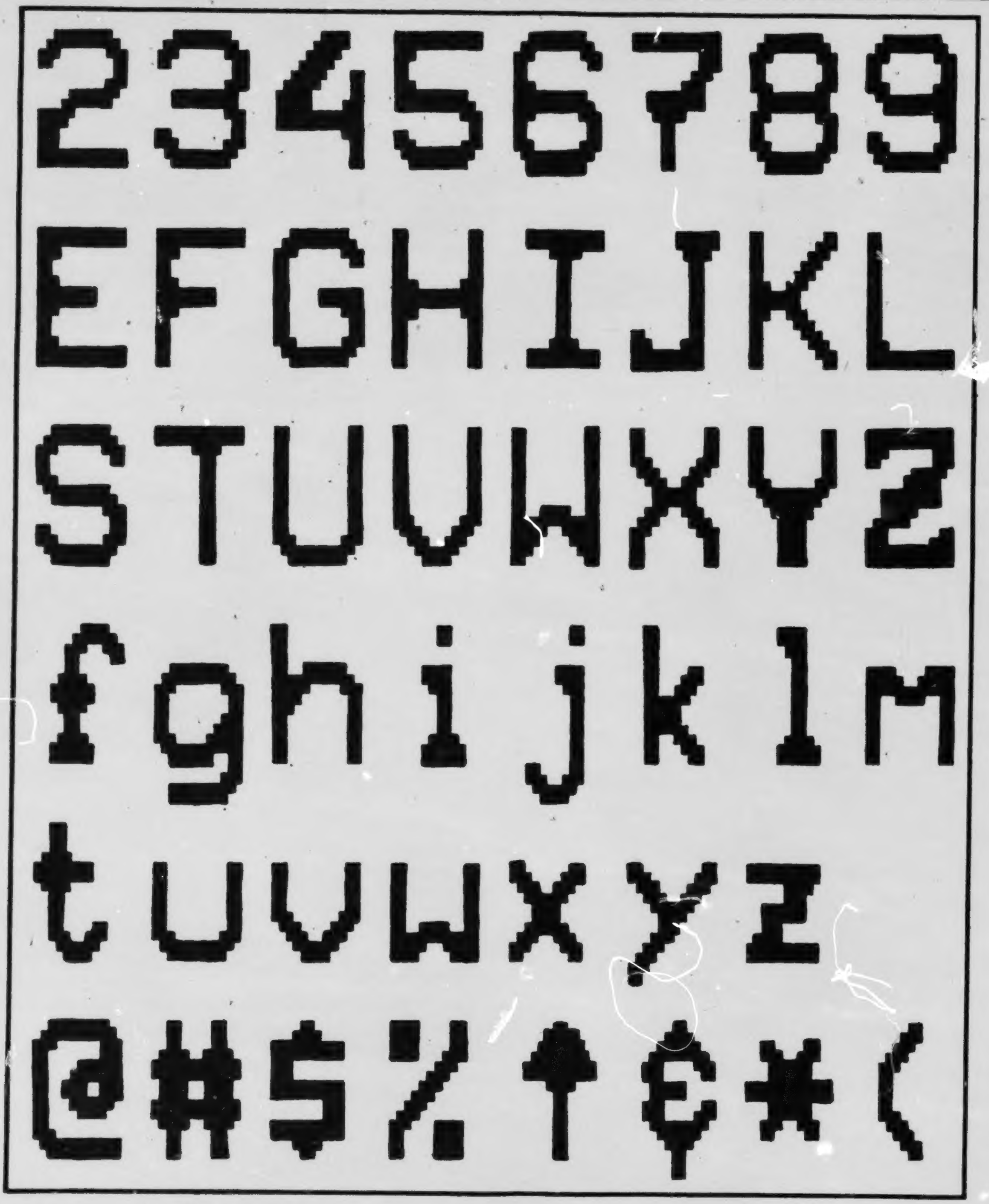
no

HOW IT WORKS

Unit reads IBM punch cards and generates either tactile or voice output for the user.

(Information provided by J.C. Swail, N.R.C.)

LARGE LETTER COMPUTER PRINT-OUT



23456789

EFGHIJKL

STUVWXYZ

fghijklm

tuvwxyz

@#$%↑¢*(

Print-Out courtesy of McBurney
Resource Center for Persons with
Disabilities, University of
Wisconsin-Madison

LARGE LETTER COMPUTER PRINT-OUT

DEVELOPER

Paul Haeberli
Prof. Ed Desautels
Computer Sciences
University of Wisconsin-Madison
Madison, WI 53706
(608) 262-0620

CONTACT PERSON

Prof. Ed Desautels
Computer Sciences
University of Wisconsin-Madison
Madison, WI 53706
(608) 262-0620

WHERE IT IS USED

Computer Processing
Reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

used at University of Wisconsin-Madison

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

Printronix Inc.
17421 Derian Avenue
P.O. Box 19559
Irvine, CA 92713

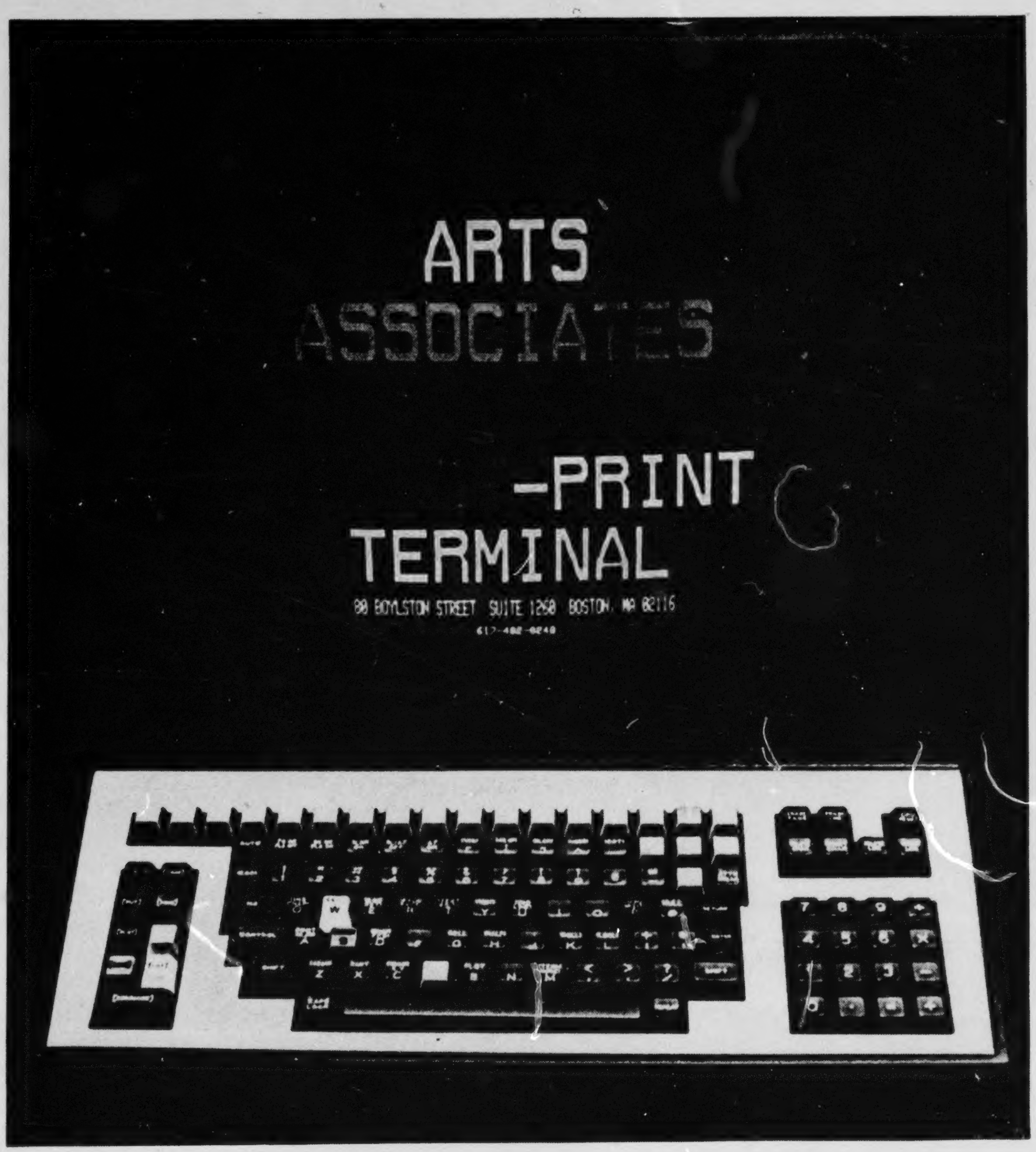
Also see appendix for distributor list of "Printronix" printer.

HOW IT WORKS

A program was written to print text on a dot matrix printer, ("Printronix"), and produce the text in large letters. Letter size could be changed by modifying the program. The printer can be driven by almost any available computer.

(Information provided by Professor Ed Desautels, UW-Madison.)

LARGE PRINT VIDEO TERMINAL (LPVT)


ARTS
ASSOCIATES
-PRINT
TERMINAL
80 BOYLSTON STREET SUITE 1260 BOSTON, MA 02116
617-482-0240

Photograph courtesy of ARTS
Associates, Inc.

LARGE PRINT VIDEO TERMINAL (LPVT)

DEVELOPER

ARTS Systems, Inc.
80 Boylston Street
Suite 1260
Boston, MA 02116
(617) 482-8248

CONTACT PERSON

Peter Duran
ARTS Systems, Inc.
80 Boylston Street
Suite 1260
Boston, MA 02116
(617) 482-8248

WHERE IT IS USED

Computer Programming
Data Entry
Information Retrieval
Reading
Word Processing

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

Sensory Aids Foundation - California;
Xerox - New York

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

ARTS Systems, Inc.
80 Boylston Street
Suite 1260
Boston, MA 02116

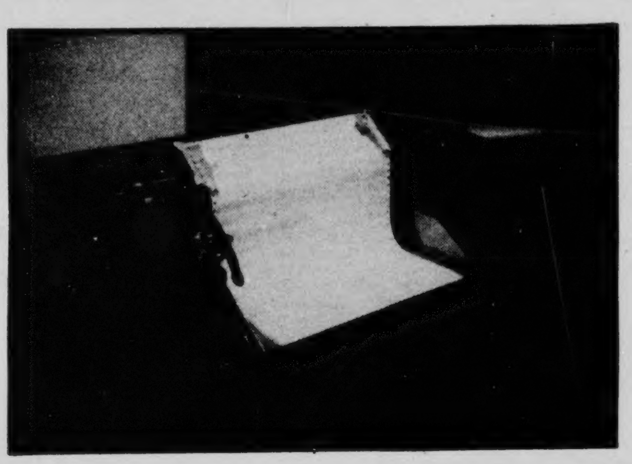
$10,500

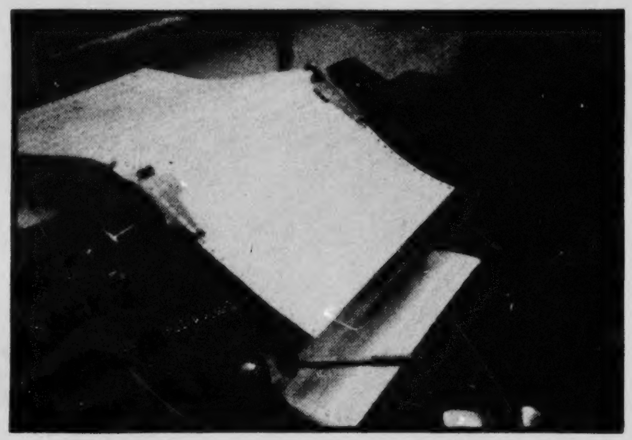
HOW IT WORKS

LPVT is a modified CRT terminal that plugs into a computer system through the RS232C interface and allows the user to select the size print to be displayed on the screen. The user can select four character sizes: standard 3/16", double height 6/16", giant 1½" or double giant 3". The user can select from eight foreground and background color combinations to provide the best contrast for individual visual needs. This unit can be used by both visually impaired and unimpaired people.

(Information based on ARTS literature.)

MOUTHSTICK OPERABLE COMPUTER PRINTOUT READER/REVIEWER





Photographs courtesy of
David F. Law, Jr.

MOUTHSTICK OPERABLE COMPUTER PRINTOUT READER/REVIEWER

DEVELOPER

Woodrow Wilson Rehab. Ctr.
Rehab. Engineering Dept.
Fishersville, VA 22939
(703) 885-9724

CONTACT PERSON

David F. Law, Jr.
Woodrow Wilson Rehab. Ctr.
Rehab. Engineering Dept.
Fishersville, VA 22939
(703) 885-9725

WHERE IT IS USED

Data Processing

PROBLEM(S) IT OVERCOMES

difficulty experienced by quadriplegic employees in data processing

FIELD TESTED

yes

Woodrow Wilson Rehabilitation Center

REGULATORY APPROVAL

no

WARRANTY PROVIDED

Information not available

FOR SALE

Woodrow Wilson Rehabilitation Center
Rehab. Engineering Dept.
Fishersville, VA 22939

$228.60

HOW IT WORKS

This unit feeds a stack of continuous form paper from a holding tray, past the operator's work area, and into another holding tray. Unit has a two-speed reversible motor thus allowing it to scan in either direction. Paper flows over a metal backing plate which allows alterations or corrections to be made by mouthstick writer.

(Information provided by David F. Law, Jr.)

THE ORATOR TALKING TERMINAL

Photograph not available

THE ORATOR TALKING TERMINAL

DEVELOPER

ARTS Computer Products
80 Boylston Street
Suite 1260
Boston, MA 02116
(617) 482-8248

CONTACT PERSON

Peter Duran
ARTS Computer Products
80 Boylston Street
Suite 1260
Boston, MA 02116
(617) 482-8248

WHERE IT IS USED

Computer Programming
Data Entry
Word Processing

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

ARTS Computer Products
80 Boylston St.
Suite 1260
Boston, MA 02116

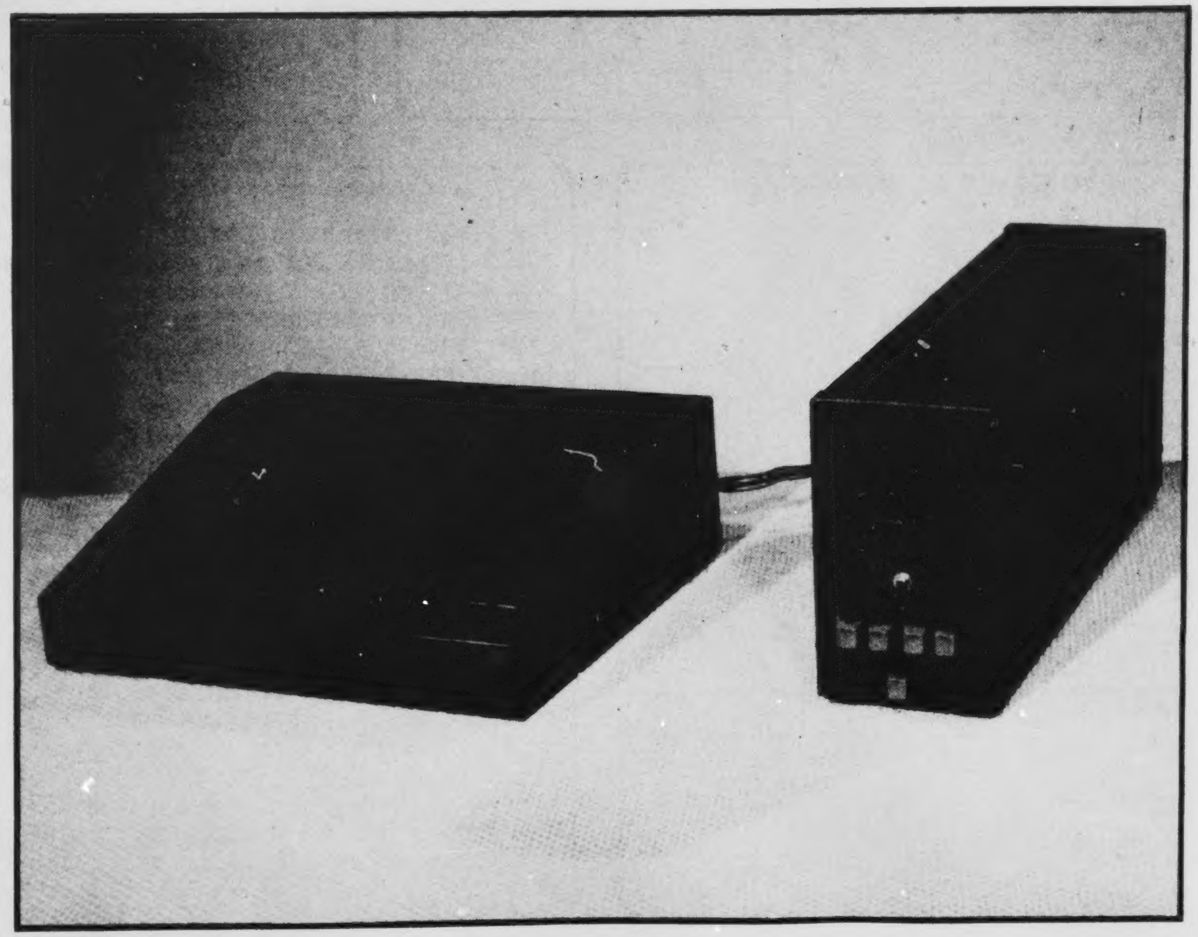
$10,000 complete unit

HOW IT WORKS

The Orator enables a computer to speak its input or output in synthetic speech. The user can select speech rate, when to hear speech, whether or not to hear capitalization, punctuation, etc. The Orator can be set in either word mode or spell mode to pronounce whole words or spell each character. In word mode the Orator uses 300 rules to produce the appropriate sound giving it an unlimited vocabulary.
One of the Orator's capabilities is the "Echo" which speaks material as it is being typed. It can speak characters, words or lines as they are entered.
The Orator software package is available for a number of different computers, (contact ARTS). There is also a complete Orator Unit consisting of the Orator software in PROMs using an 8080 microprocessor, a keyboard and synthesizer. The Orator Unit is RS232C compatible and will operate in both local and on line modes.

(Information based on ARTS literature; verbal explanation provided by Ron Myren, Wisconsin Vocational Studies Center.)

SYNTHETIC SPEECH TERMINAL



Photograph courtesy of J.C. Swail

SYNTHETIC SPEECH TERMINAL

DEVELOPER

J.C. Swail
National Research Council
M-50
Dee R182 Montreal Road
Ottawa Ontario
Canada
K1A 0R8

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Computer Programming
Data Entry
Information Retrieval

PROBLEM(S) IT OVERCOMES

visual impairment

HOW IT WORKS

Unit accepts material in serial ASCII RS232 interface and generates synthetic spelled speech. It has storage capacity of 8,000 characters with search facilities.

(Information provided by J.C. Swail, N.R.C.)

FIELD TESTED

yes

Canadian National Institute for the Blind-Toronto, Canada

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

no

TALKING KEYPUNCH AND CARD READER FOR THE VISUALLY-HANDICAPPED

Photograph not available

TALKING KEYPUNCH AND CARD-READER FOR THE VISUALLY HANDICAPPED

DEVELOPER

Professor C.Y. Suen
Concordia University
Montreal, Quebec, Canada
and
Professor M.P. Beddoes
Univ. of British Columbia
Vancouver, B.C., Canada

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Computer Programming
Data Entry

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

Concordia University-Montreal, Canada
Univ. of British Columbia-Vancouver, Canada

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

M.P. Beddoes
Dept. of Electrical Engineering
University of British Columbia
Vancouver, B.C. Canada
V6T 1W5

HOW IT WORKS

Unit reads punched-cards and in synthesized voice tells what has been read. In synthesized voice it can tell the user which character has been keyed in. Same speech synthesizer can be used for any electronic equipment such as a computer terminal and tells the user what has been keyed or punched.

(Information provided by Professor C.Y. Suen, Concordia University.)

TOTAL TALK FULL SPEECH COMPUTER TERMINAL

DEVELOPER

Maryland Computer Services
502 Rock Spring Avenue
Bel Air, MD 21014
(301) 838-8888

CONTACT PERSON

Phyllis Barnes
Maryland Computer Services
502 Rock Spring Avenue
Bel Air, MD 21014
(301) 838-8888

WHERE IT IS USED

Computer Programming
Data Entry
Education
Information Retrival
Word Processing

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

Maryland Computer Services
502 Rock Spring Avenue
Bel Air, MD 21014

$5,995.00

HOW IT WORKS

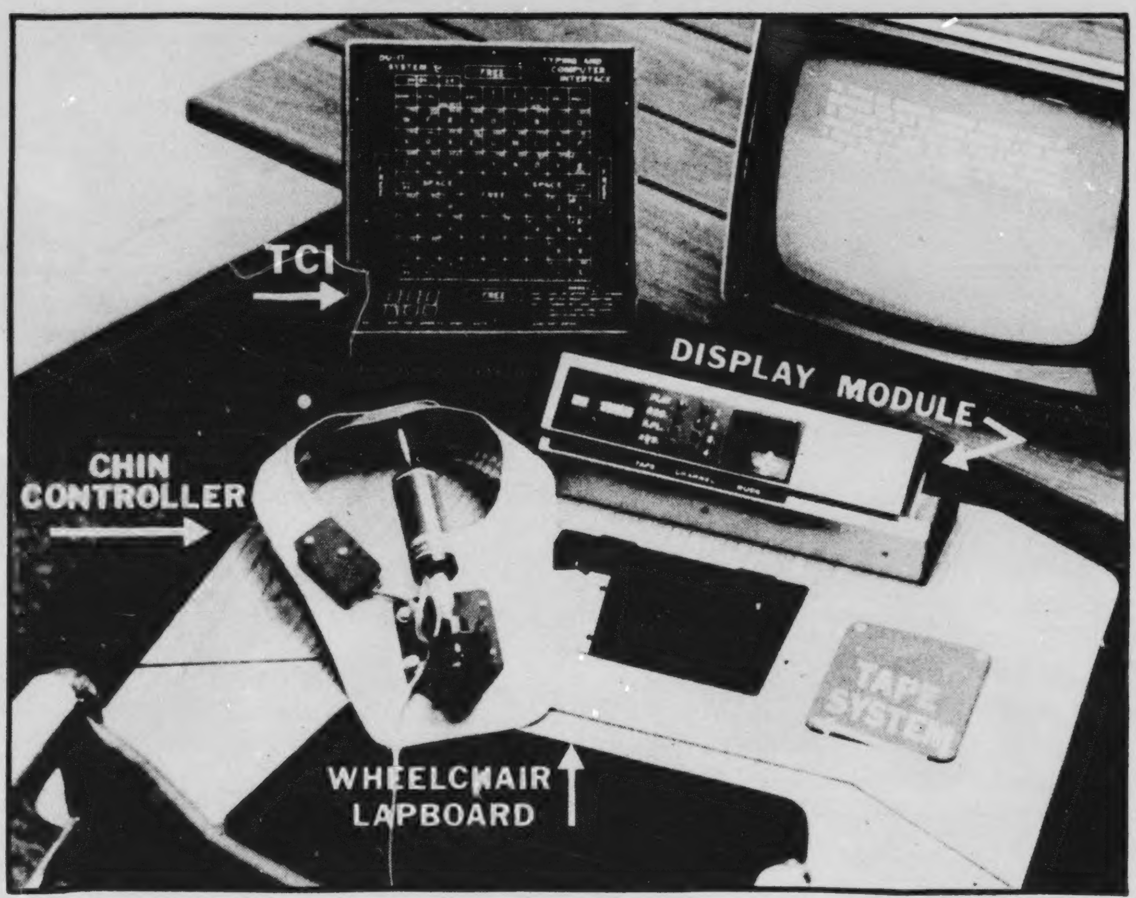
Total Talk is a computer terminal with the ability to speak in full word synthetic speech. Total Talk converts computer transmitted data and information entered on the keyboard into synthetic speech. It has an unlimited vocabulary using rules for enunciation and inflection for voice clarity. The user can listen to full word or spelled speech. Total Talk can be instructed to speak information as it is sent to or received by the computer. Users can position the cursor (up, down, left, right) to begin speaking from the desired location. A CURSOR LOCATION key vocally tells the user the cursor's position on the CRT screen.
Total Talk uses the Hewlett-Packard 2621A Interactive Terminal. The speech synthesizer, CRT screen, earphone jack and control knobs are housed in one unit. A keyboard is attached by cable.

(Information based on Maryland Computer Services literature.)

TOTAL TALK FULL SPEECH COMPUTER TERMINAL

Photograph courtesy of Maryland Computer Services

TYPING AND COMPUTER INTERFACE (TCI-1)


TCI
DISPLAY MODULE
CHIN CONTROLLER
TAPE SYSTEM
WHEELCHAIR LAPBOARD

Photograph courtesy of
Romich, Beery and Bayer,
Inc.

TYPING AND COMPUTER INTERFACE (TCI-1)

DEVELOPER

Romich, Beery and Bayer, Inc.
RD 2, Box 191
Shreve, OH 44676
(216) 567-2906

CONTACT PERSON

David Bayer
Romich, Beery and Bayer, Inc.
RD 2, Box 191
Shreve, OH 44676
(216) 567-2906

WHERE IT IS USED

Computer Programming
Data Entry
Information Retrival
Typing

PROBLEM(S) IT OVERCOMES

limited movement control

FIELD TESTED

yes

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Romich, Beery and Bayer, Inc.
RD 2, Box 191
Shreve, OH 44676

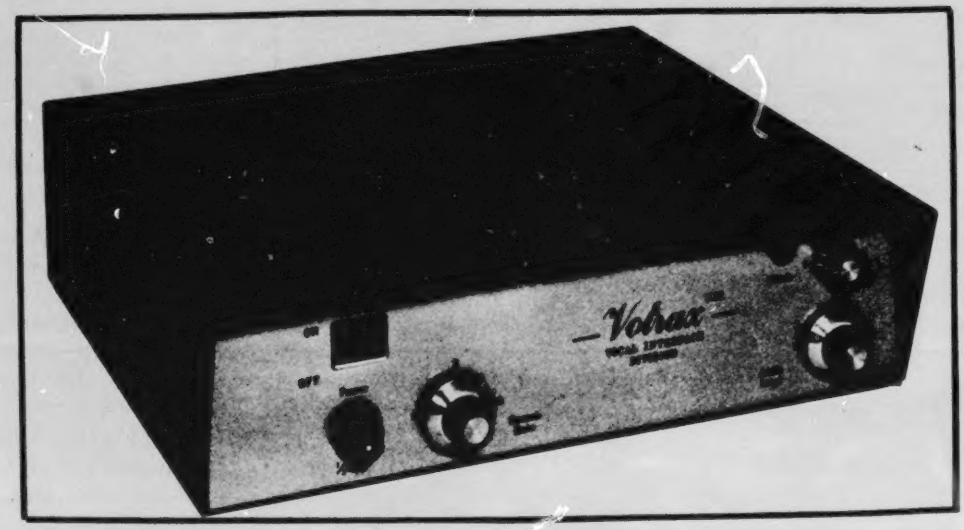
$800.00-$2400.00 depending on application

HOW IT WORKS

The Typing & Computer Interface (TCI) operates as a plug-in accessory to the DU-IT MCB wheelchair control system (see p. 308). With extra interface hardware it can be operated by itself or thru the DLT wheelchair system. It provides a means to interface with a computer or to accomplish typing and other data entry operations. It requires operator precision in positioning a chin controller or joystick (range of motion expansion technique). Typical users achieve approximately 10 wpm typing rates (in the first few hours of use).

(Information provided by David M. Bayer, Romich, Beery and Bayer, Inc.)

VS-6 AND ML-I VOICE SYNTHESIZERS


ON
OFF
Power
Votrax
VOCAL INTERFACE

VS-6

ML-I MULTI-LINGUAL VOICE SYSTEM
Normal
Votrax
ON
OFF
Power

ML-I

Photographs courtesy of Votrax

VS-6 and ML-I VOICE SYNTHESIZERS

DEVELOPER

Votrax Division
Federal Screw Works
500 Stephenson Hwy.
Troy, MI 48084
(313) 588-2050

CONTACT PERSON

Diane DeHaven
Votrax Division
Federal Screw Works
500 Stephenson Hwy.
Troy, MI 48084
(313) 588-2050

WHERE IT IS USED

Computer Programming
Education
Information Retrieval - (in place of person)

PROBLEM(S) IT OVERCOMES

visual impairment of a computer programmer

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Votrax Division
Federal Screw Works
500 Stephenson Hwy.
Troy, MI 48084

Price dependent on customer specifications.

HOW IT WORKS

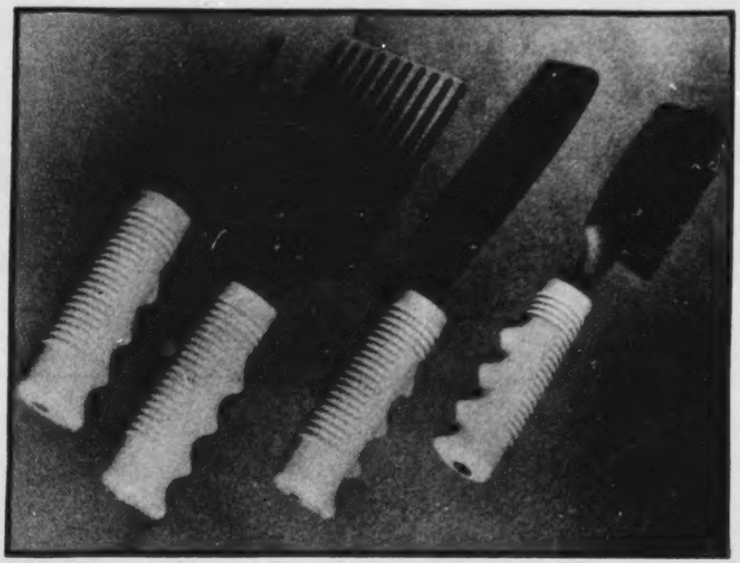
These models are solid state units producing electronically synthesized speech from low-speed digital input. The synthesized voice speaks back the data entered by the programmer. A Votrax interface provides the means of getting digital information from the driving device (usually a computer), by instructing the synthesizers to sound out phonemes in a sequence forming words, the synthesizer phrases and sentences. Rate and inflection levels are also assigned to each phoneme giving the synthesized human voice characteristically natural flowing speech. Interfaces are compatible with most conventional computers and communications equipment. The ML-I model also has a multi-lingual voice system.

(Information based on Votrax literature.)

COSMETOLOGY

Combs and Brushes 246

Nail Clippers 248



Grooming Aids

Nail Brush with Suction Cups

Photographs courtesy of
Maddak, Inc.

COMBS AND BRUSHES

DEVELOPER

Manufactured by:
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

CONTACT PERSON

Fred M. Joslyn
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

WHERE IT IS USED

Cosmetology
Personal Grooming

PROBLEM(S) IT OVERCOMES

limited manipulative ability

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc.
Pequannock, NJ 07440

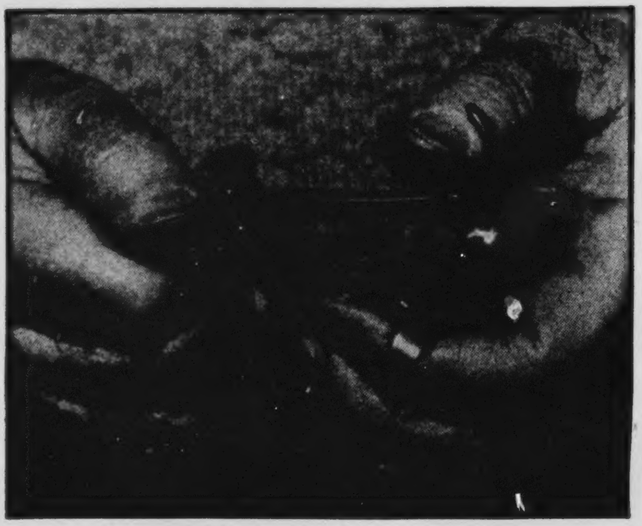
Built-up Grooming Aids	$6.00 ea. piece
Nail Brush with Suction Cups	$3.90

HOW IT WORKS

The Grooming Aids are cemented into filled bicycle type handles with finger grip knobs. The handles have a pleasant feel since they are of resilient vinyl and are convenient for right or left hand. The Nail Brush with Suction Cups is a nylon bristle brush mounted on 2 suction cups. It has a hard plastic back and mounts on tub, sink or counter top.

(Information based on Maddak Catalog No. 479, 1979.)

Nail Clipper



Finger Fitting Nail Clipper

Photographs courtesy of
Maddak, Inc.

NAIL CLIPPERS

DEVELOPER

Manufactured by:
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

CONTACT PERSON

Fred M. Joslyn
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

WHERE IT IS USED

Cosmetology
Personal Grooming

PROBLEM(S) IT OVERCOMES

limited manipulative ability or finger dexterity

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc.
Pequannock, NJ 07440

Nail Clipper	$6.90
Finger Fitting Nail Clipper	$2.50

HOW IT WORKS

The Nail Clipper is a standard nail clipper and file attached to a heavy plastic block. Two suction cups hold the block to a table top or other surface. The Finger Fitting Nail Clipper has finger retaining mounts located at the ends of the clipper. The mounts prevent the clipper from dropping, stabilize the grip and help maintain proper position while cutting. Standard nail file is included.

(Information based on Maddak Catalog No. 479, 1979.

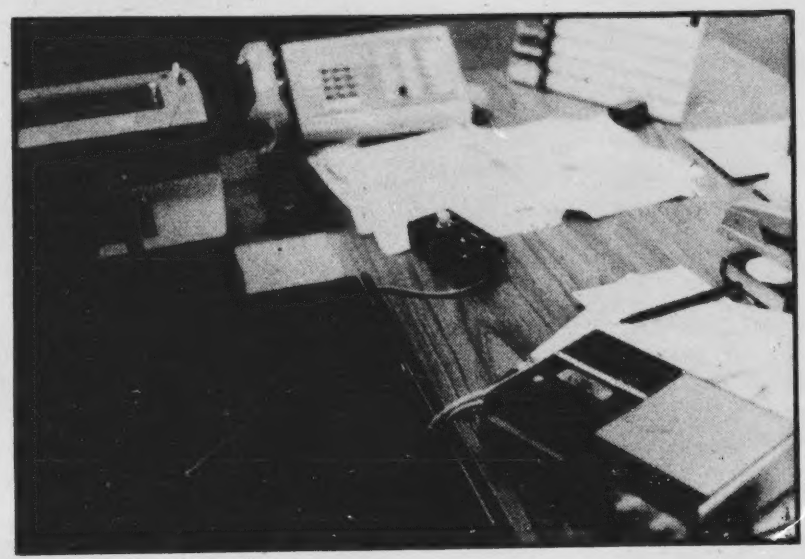
DICTATION

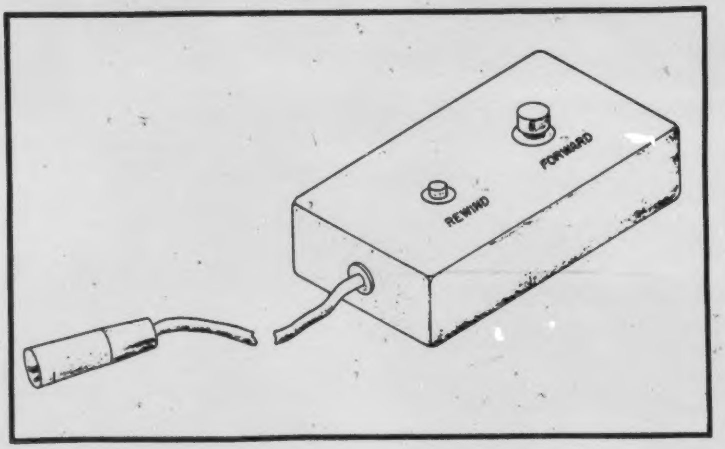
Dictaphone Switch for Use by a Paraplegic 252

Dictation System, Modified 254

Easicorder (REC-1) 256

DICTAPHONE SWITCH FOR USE BY A PARAPLEGIC




FORWARD
REWIND

Photograph and diagram
courtesy of John H.
Leslie, Jr.

DICTAPHONE SWITCH FOR USE BY A PARAPLEGIC

DEVELOPER

Rehabilitation Engin. Ctr.
2021 North Old Manor
Wichita, KS 67208
(316) 688-1888

CONTACT PERSON

Leonard Anderson
Rehabilitation Engin. Ctr.
2021 North Old Manor
Wichita, KS 67208
(316) 688-1888

WHERE IT IS USED

Dictation

PROBLEM(S) IT OVERCOMES

unable to use foot switch on dictaphone

FIELD TESTED

yes

Center Industries Corporation-Wichita, KS

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

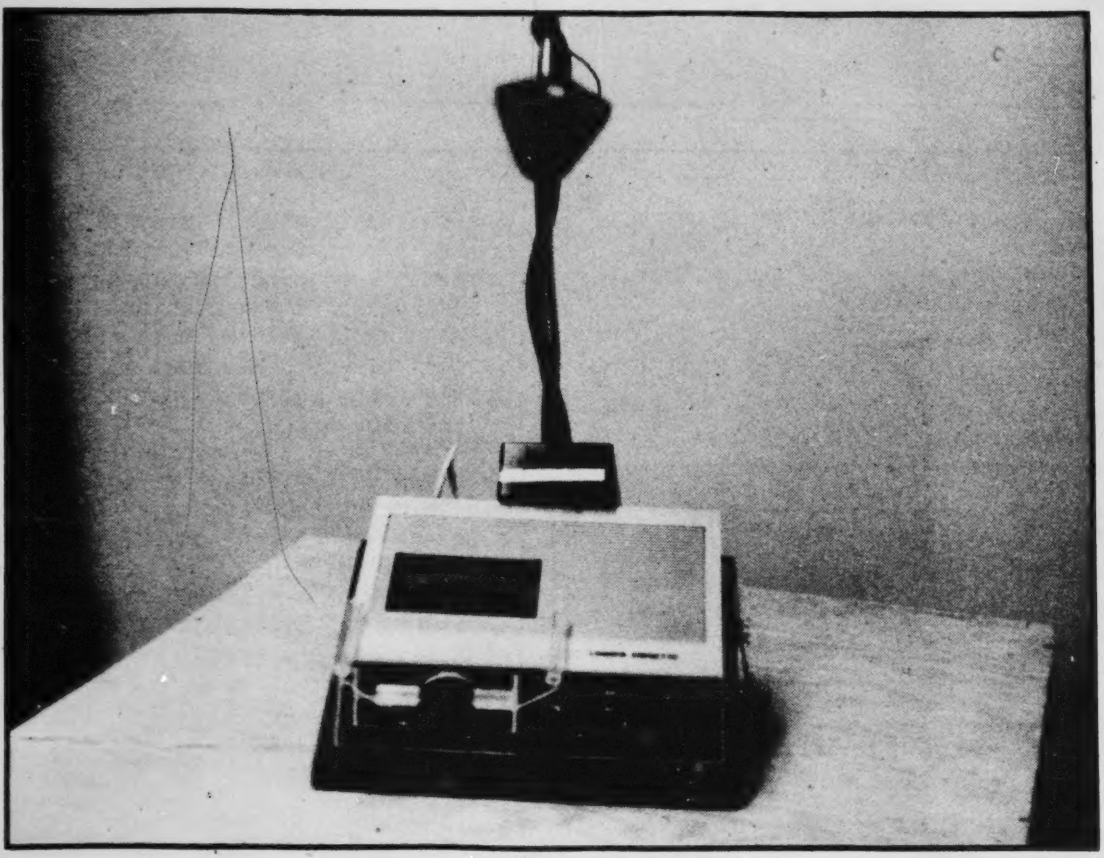
no

HOW IT WORKS

The switch is used to operate a dictaphone through the utilization of a hand control. The function of the foot rocker switch was duplicated using a push to turn on and a push to turn off switch to control the play mode. A single pole double throw momentary push button switch is used to control the rewind mode. These switches are mounted in a small box as shown in the illustrations. The user can operate the dictaphone with either hand and has no problem utilizing the piece of equipment. The new switch is plugged in parallel with the old switch; thus when one desires to use the foot operated rocker switch rather than the hand operated push button switch, one merely unplugs the hand operated switch and proceeds to control the unit with the foot operated switch.

(Information provided by John H. Leslie, Jr., Rehabilitation Engineering Center.)

DICTATION SYSTEM, MODIFIED



Photograph courtesy of Don
Warren and Ricardo Cerna

DICTATION SYSTEM, MODIFIED

DEVELOPER

Clinical Convenience
Products
Contracting Serv. Dir.
2070 Helena Street
Madison, WI 53704
(608) 251-2882

CONTACT PERSON

Don Warren
2070 Helena Street
Madison, WI 53704
(608) 251-2882

WHERE IT IS USED

Dictation

PROBLEM(S) IT OVERCOMES

limited motor control

FIELD TESTED

yes

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Clinical Convenience Products
2070 Helena Street
Madison, WI 53704

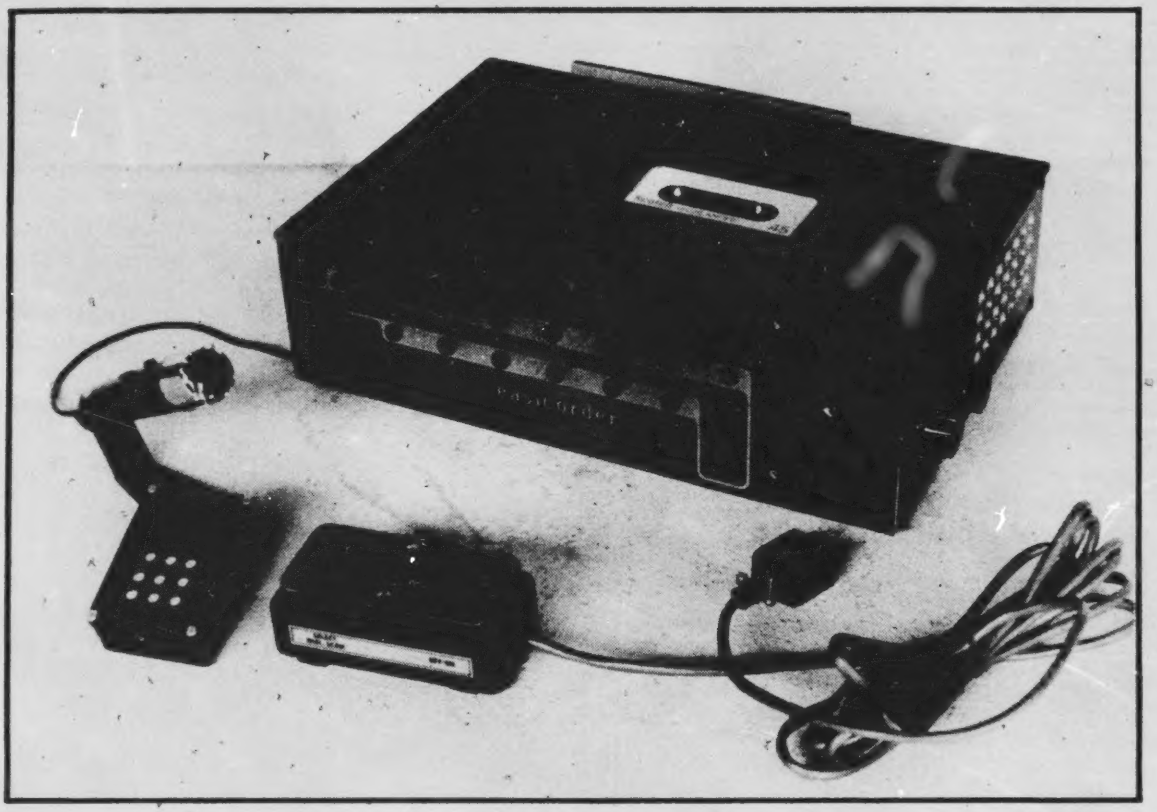
HOW IT WORKS

Light puff control is utilized for controlling two switches and all functions, (record, play, fast rewind and stop), of the dictation equipment by individuals that require a hands-off operation. The microphone connection is connected directly to the power supply of the recording unit. This eliminates problems with microphone battery life. System can be equipped with capacitance discharge ground-place control for on and off. Alternative switching options available--pneumatic bulb switch, slam switch, photo switch.

(Information provided by Ricardo Cerna, Rehabilitation Engineering Specialist, Wisconsin Division of Vocational Rehabilitation, and Don Warren.)

251

EASICORDER (REC-1)



Photograph courtesy of
Romich, Beery and Bayer,
Inc.

EASICORDER (REC-1)

DEVELOPER

Romich, Beery and Bayer, Inc.
RD 2, Box 191
Shreve, OH 44676
(216) 567-2906

CONTACT PERSON

David Bayer
Romich, Beery and Bayer, Inc.
RD 2, Box 191
Shreve, OH 44676
(216) 567-2906

WHERE IT IS USED

Dictation
Recording

PROBLEM(S) IT OVERCOMES

inability to write

FIELD TESTED

yes

Institute of Rehabilitative Medicine, New York University - NYC

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Romich, Beery and Bayer, Inc.
RD 2, Box 191
Shreve, OH 44676

$1250

HOW IT WORKS

The Easicorder is a tape recording system intended for use by cerebral palsied and spinal cord injured persons. It can be used for both notetaking and dictation functions. It is operated with a single or dual-acting control switch. A single movement allows the user to select - play, record, fast forward, rewind, fast playback, track changes, and underline modes. The cassette need never be manually flipped.

(Information provided by David M. Bayer, Romich, Beery and Bayer, Inc.)

DUPLICATING AND PRINTING

Electronic Scanning Machine Model No. 1100 260

LED-120 (Line Embossed Device) . . . 262

Model BD-3 (Braille Device) 264

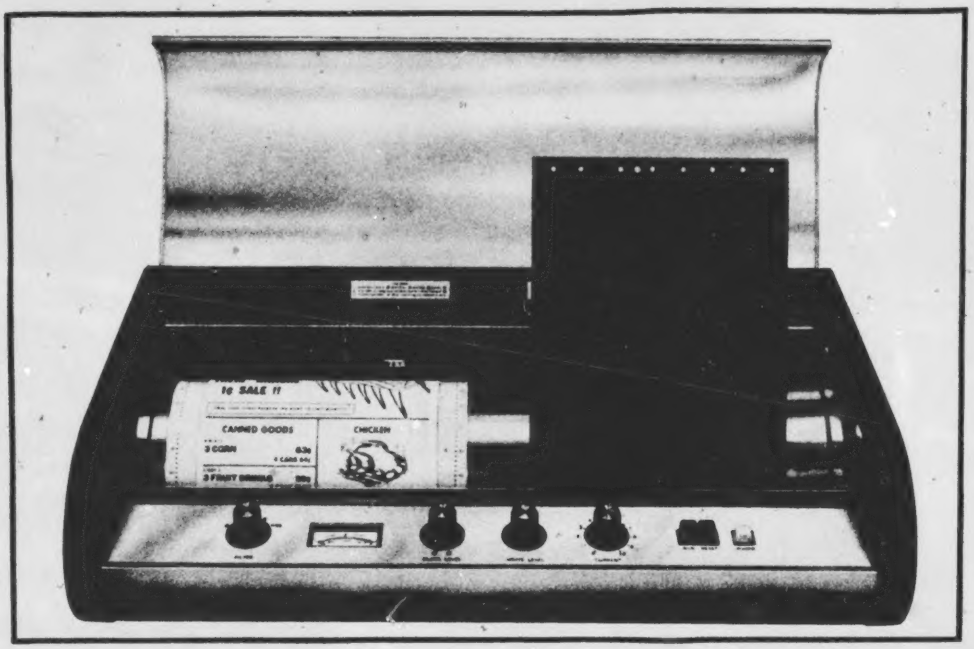
Offset Press Model No. 319 266

Plate Processor Model No. M60 268

Stencil Duplicator Model No. 460s . . 270

Thermoform Brailon^{R} Duplicator . . . 272

ELECTRONIC SCANNING MACHINE MODEL NO. 1100



to SALE !!
CANNED GOODS
CHICKEN
3 CORN
3 FRUIT DRINKS

Photograph courtesy of
Gestetner Corporation

ELECTRONIC SCANNING MACHINE MODEL NO. 1100

DEVELOPER

Gestetner Corporation
Gestetner Park
Yonkers, NY 10703
(914) 968-6666

CONTACT PERSON

Joseph Schachner
or Robert Wallace
Gestetner Corporation
Gestetner Park
Yonkers, NY 10703
(914) 968-6666

WHERE IT IS USED

Communication
Duplication
Printing

PROBLEM(S) IT OVERCOMES

limited hand control

FIELD TESTED

yes

Camp Jawonio, Rockland County Center for Physically Handicapped, Inc. - New City, NY

REGULATORY APPROVAL

UL; Canadian Standards Association

WARRANTY PROVIDED

yes

FOR SALE

Gestetner Corporation
Gestetner Park
Yonkers, NY 10703

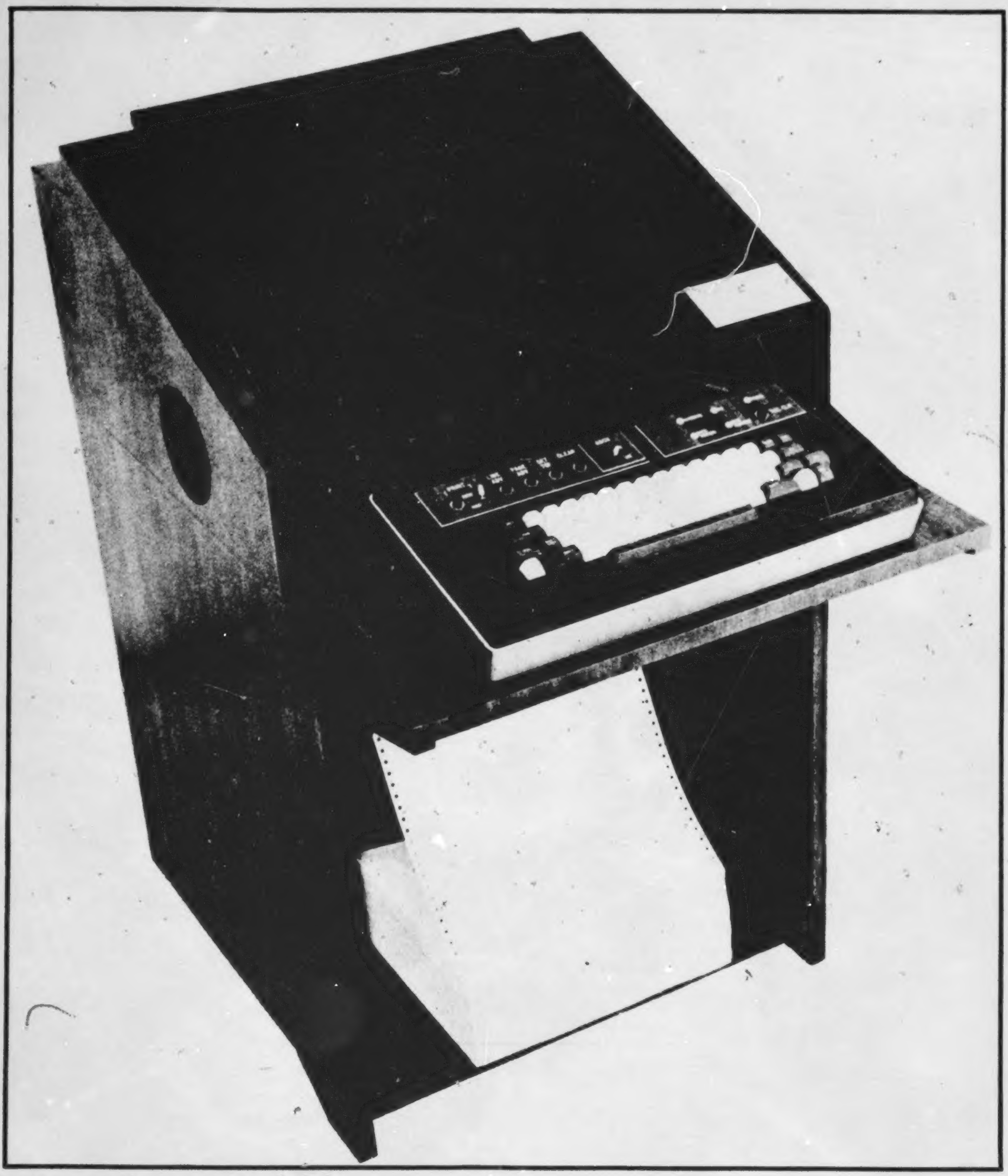
1100 Electronic Scanning Machine	$2300
Plus Modification	$ 35
Stand (Optional)	$ 100

HOW IT WORKS

This type of electronic stencil imager involves push button operations. Dial adjustments may be necessary to change density and color separation. The original is placed around one cylinder and a blank stencil master is attached to the companion cylinder.
Other printing equipment and supplies are available from this company.

(Information based on product brochure.)

LED-120 (LINE EMBOSSED DEVICE)



Photograph courtesy of Triformation Systems

LED-120 (LINE EMBOSSED DEVICE)

DEVELOPER

Triformation Systems
3132 S.E. Jay Street
Stuart, FL 33494
(305) 283-4817

CONTACT PERSON

Guy Carbonneau, President
Triformation Systems
3132 S.E. Jay Street
Stuart, FL 33494
(305) 283-4817

WHERE IT IS USED

Braille Printing
Wherever a standard computer terminal is used (Business, Banking, Airlines, etc.)

PROBLEM(S) IT OVERCOMES

visual impairment; inability to read computer printout

FIELD TESTED

yes

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Triformation Systems
3132 S.E. Jay Street
Stuart, FL 33494

As of 1/1/78
$14,500.00 - LED-120
$ 7,400.00 - LED-15

HOW IT WORKS

The LED-120 unit is a buffered, computer terminal that prints in braille. It prints forty character braille lines on fanfold, continuous form paper at 180 lines per minute, and operates at any speed up to 120 C.P.S. (characters per second).

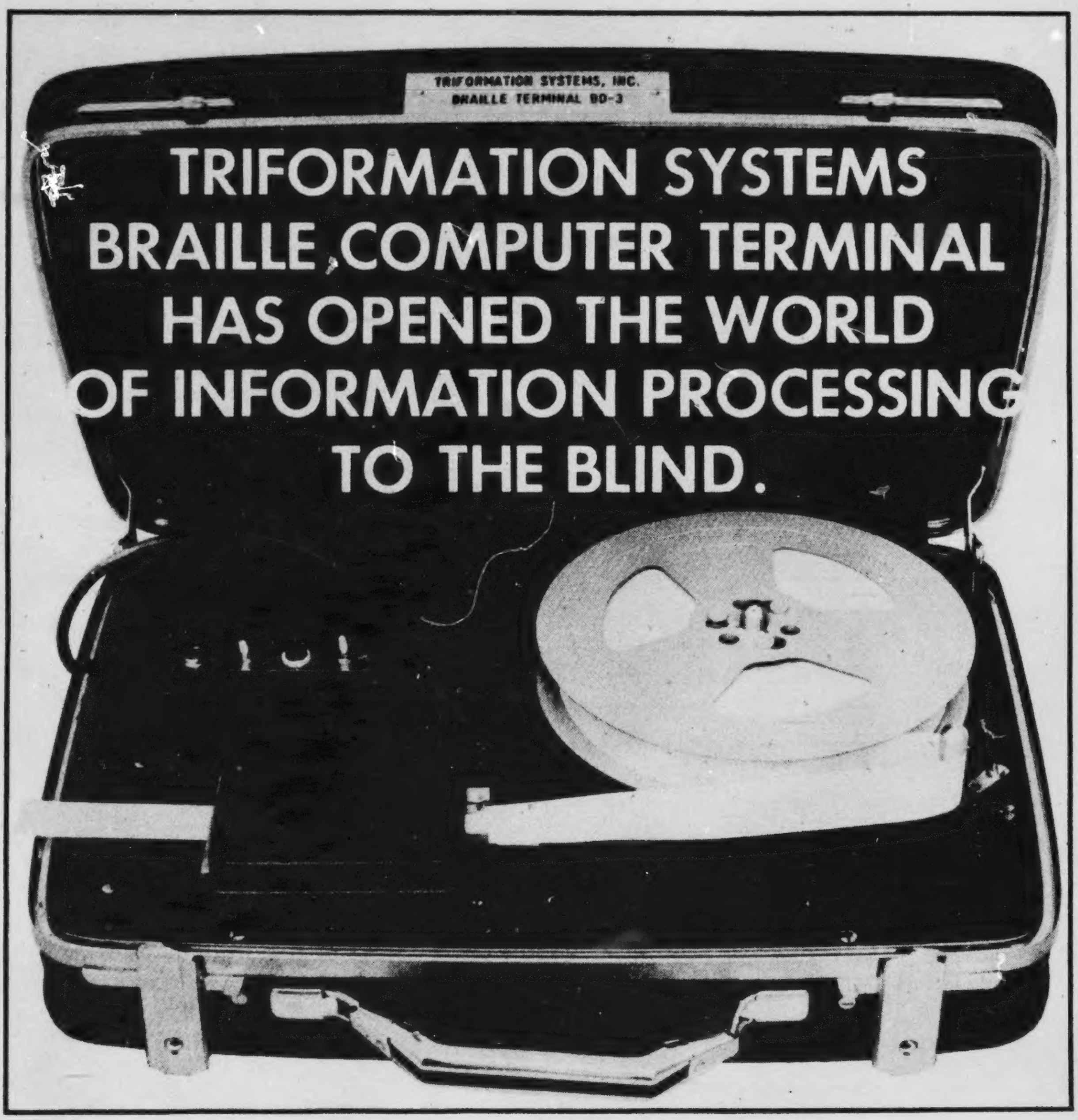
When used as a high speed braille printer, it can produce braille from a keyboard, from a computer, from magnetic cassettes or from almost any source of coded information.

Many miscellaneous equipment options such as a transparent switch that allows all control characters to be embossed are available with the LED-120.

There is also a less expensive model available, the LED-15, with an operating speed up to 15 C.P.S. Several equipment, installation and training options are available for the LED-15 and the LED-120 models.

(Information based on Triformation Systems product literature.)

MODEL BD-3 (BRAILLE DEVICE)


TRIFORMATION SYSTEMS, INC.
BRAILLE TERMINAL BD-3
TRIFORMATION SYSTEMS
BRAILLE COMPUTER TERMINAL
HAS OPENED THE WORLD
OF INFORMATION PROCESSING
TO THE BLIND.

Photograph courtesy of Triformation Systems

MODEL BD-3 (BRAILLE DEVICE)

DEVELOPER

Triformation Systems
3132 S.E. Jay Street
Stuart, FL 33494
(305) 283-4817

CONTACT PERSON

Guy Carbonneau, President
Triformation Systems
3132 S.E. Jay Street
Stuart, FL 33494
(305) 283-4817

WHERE IT IS USED

Braille Printing

PROBLEM(S) IT OVERCOMES

visual impairment; need to have information in braille form

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Triformation Systems
3132 S.E. Jay Street
Stuart, FL 33494

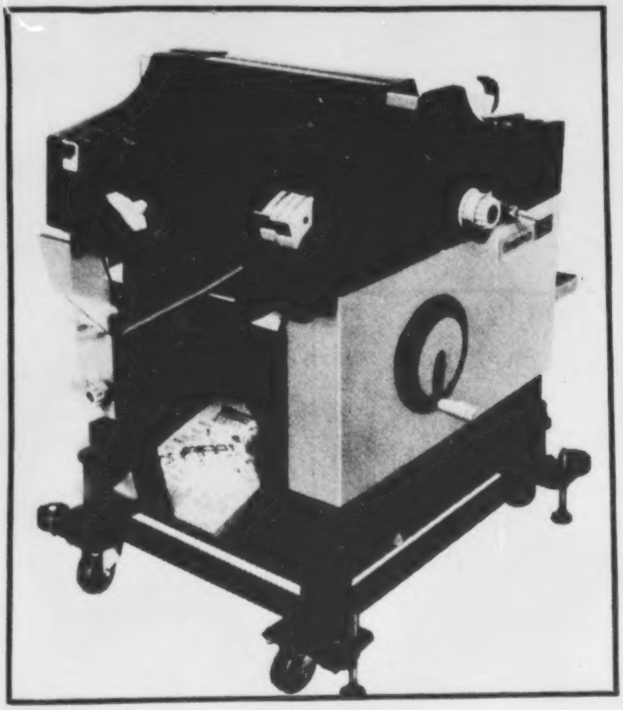
As of 1/1/80
$1,950.00

HOW IT WORKS

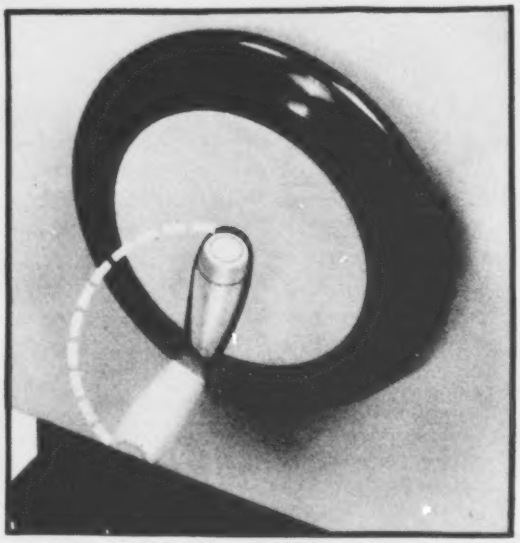
The BD-3 is a portable unit which produces braille when used in conjunction with a keyboard, digital equipment, a computer, or almost anything that uses coded information. The portable braille computer terminal embosses at the rate of 120 - 180 words per minute on a continuous strip of paper tape. The operator can read what has been typed as well as the messages that come back. Several equipment, installation and training options are available.

(Information based on Triformation Systems product literature.)

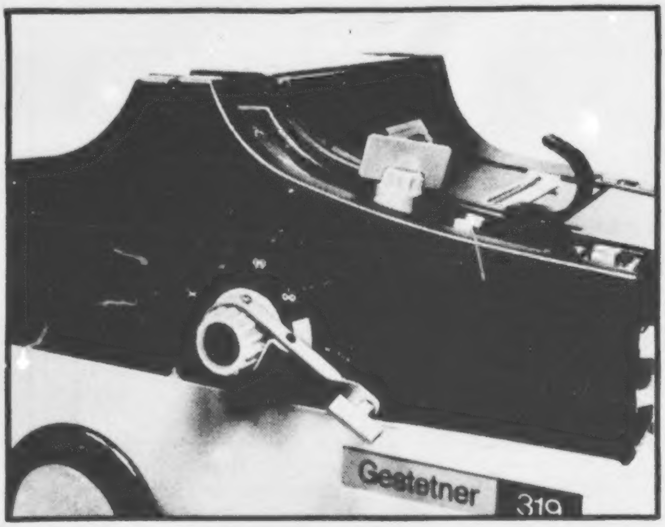
OFFSET PRESS MODEL NO. 319



Offset Press



Retractable Handle


Gestetner
319

Lever Control

Photograph courtesy of
Gestetner Corporation

OFFSET PRESS MODEL NO. 319

DEVELOPER

Gestetner Corporation
Gestetner Park
Yonkers, NY 10703
(914) 968-6666

CONTACT PERSON

Joseph Schachner
or Robert Wallace
Gestetner Corporation
Gestetner Park
Yonkers, NY 10703
(914) 968-6666

WHERE IT IS USED

Communication
Duplication
Printing

PROBLEM(S) IT OVERCOMES

limited hand control

FIELD TESTED

yes

Camp Jawonio, Rockland County Center for Physically Handicapped, Inc. - New City, NY

REGULATORY APPROVAL

UL; Canadian Standards Association

WARRANTY PROVIDED

yes

FOR SALE

Gestetner Corporation
Gestetner Park
Yonkers, NY 10703

319 Offset Duplicator	$7050
319 Cabinet	$ 295

HOW IT WORKS

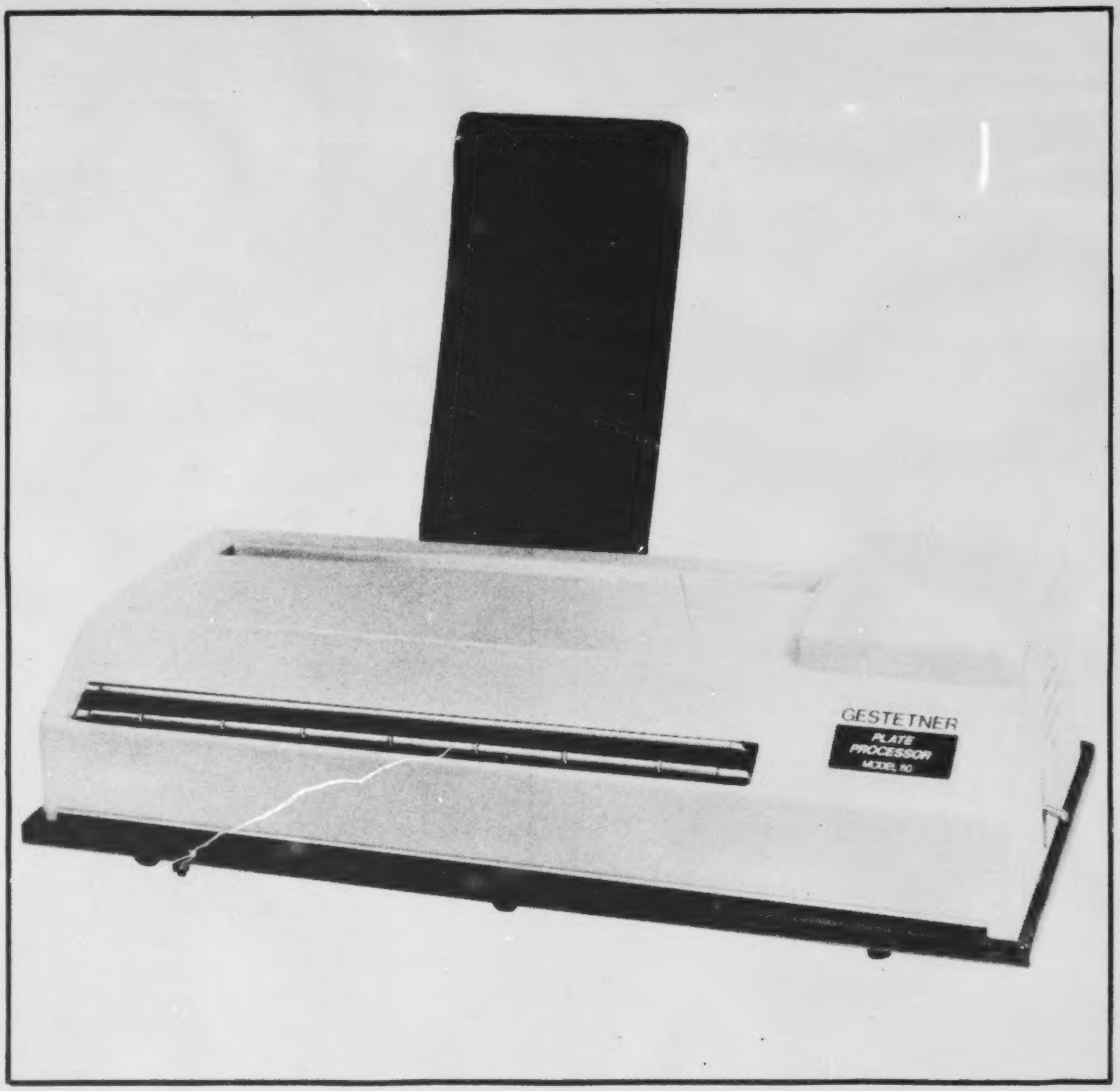
This Offset Duplicator has controls that have been designed for easy operation. Some of the special features are as follows:

- Levers instead of full-grasp controls are easier to use.
- A fold-away crank handle makes the large control wheel of the cylinder mechanism easier to manipulate.
- Twist-type knobs are equipped with special extensions that permit them to be more easily turned. The covers and lids are equipped with large plastic hooks for easy handling.
- Manipulation of the cylinder wheel will allow the plate to attach itself to the cylinder and will also eject itself after the run is completed. Even the printing blanket will be automatically washed and the power shut off at the completion of all necessary operations.
- A 'read-out' panel which shows the progress of the duplicating process with illuminated symbols.

Other printing equipment and supplies are available from this company.

(Information based on product brochures.)

PLATE PROCESSOR MODEL NO. M60


GESTETNER
PLATE PROCESSOR
MODEL 60

Photograph courtesy of
Gestetner Corporation

PLATE PROCESSOR MODEL NO. M60

DEVELOPER

Gestetner Corporation
Gestetner Park
Yonkers, NY 10703
(914) 968-6666

CONTACT PERSON

Joseph Schachner
Robert Wallace
Gestetner Corporation
Gestetner Park
Yonkers, NY 10703
(914) 968-6666

WHERE IT IS USED

Communication
Duplication
Printing

PROBLEM(S) IT OVERCOMES

limited hand control

HOW IT WORKS

Single on-off switch operates the machine to process offset plates automatically. Pressure on rollers can be adjusted to maintain perfect, even contact.

Other printing equipment and supplies are available from this company.

(Information based on product brochures.)

FIELD TESTED

yes

Camp Jawonio, Rockland County Center for Physically Handicapped, Inc. - New City, NY

REGULATORY APPROVAL

UL; Canadian Standards Association

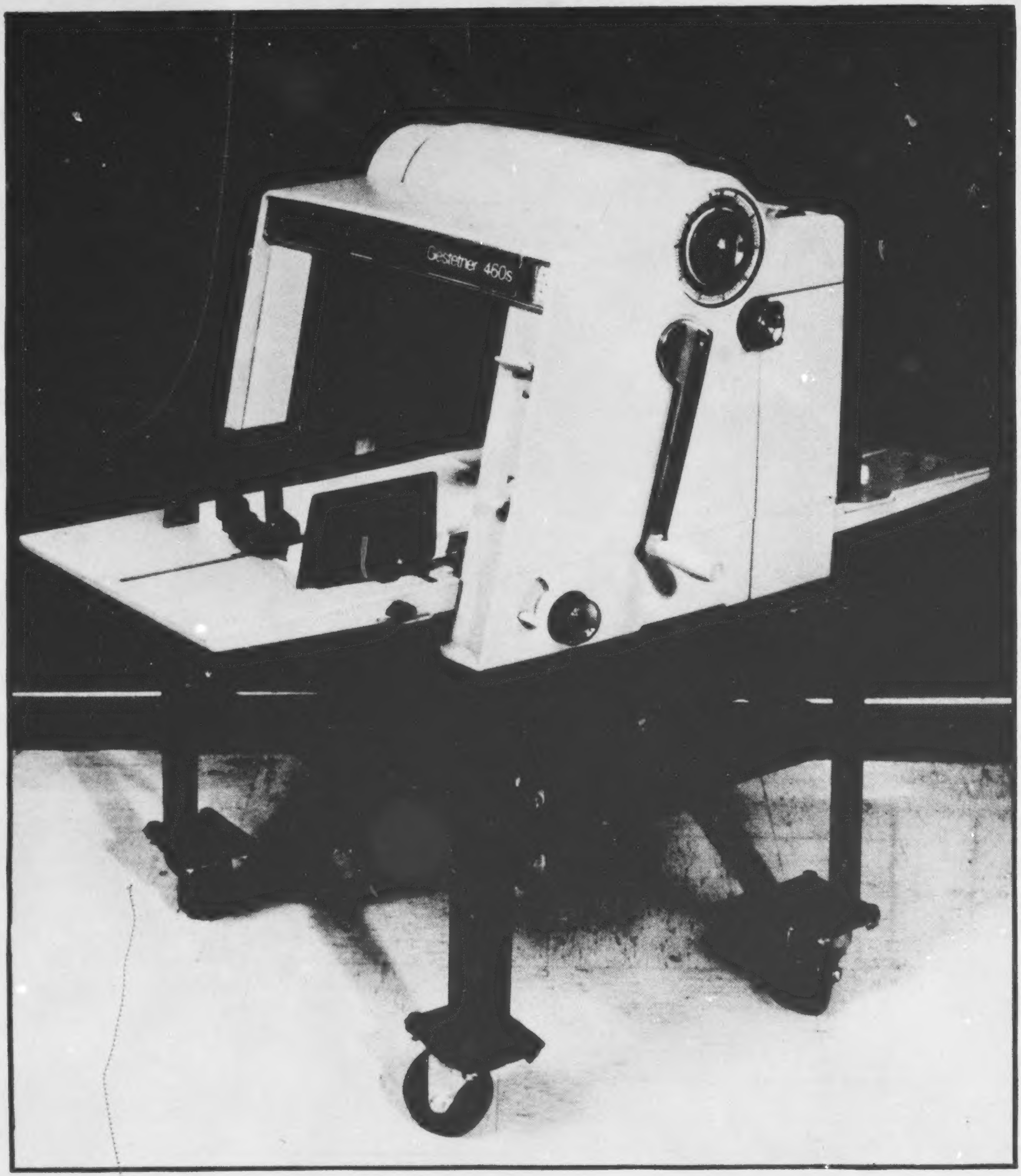
WARRANTY PROVIDED

yes

FOR SALE

Gestetner Corporation
Gestetner Park
Yonkers, NY 10703

$445


Gestetner 460s

Photograph courtesy of
Gestetner Corporation

STENCIL DUPLICATOR MODEL NO. 460's

DEVELOPER

Gestetner Corporation
Gestetner Park
Yonkers, NY 10703
(914) 968-6666

CONTACT PERSON

Joseph Schachner
or Robert Wallace
Gestetner Corporation
Gestetner Park
Yonkers, NY 10703
(914) 968-6666

WHERE IT IS USED

Communication
Duplication
Printing

PROBLEM(S) IT OVERCOMES

limited hand control

FIELD TESTED

yes

Camp Jawonio, Rockland County Center for Physically Handicapped, Inc. - New City, NY

REGULATORY APPROVAL

UL; Canadian Standards Association

WARRANTY PROVIDED

yes

FOR SALE

Gestetner Corporation
Gestetner Park
Yonkers, NY 10703

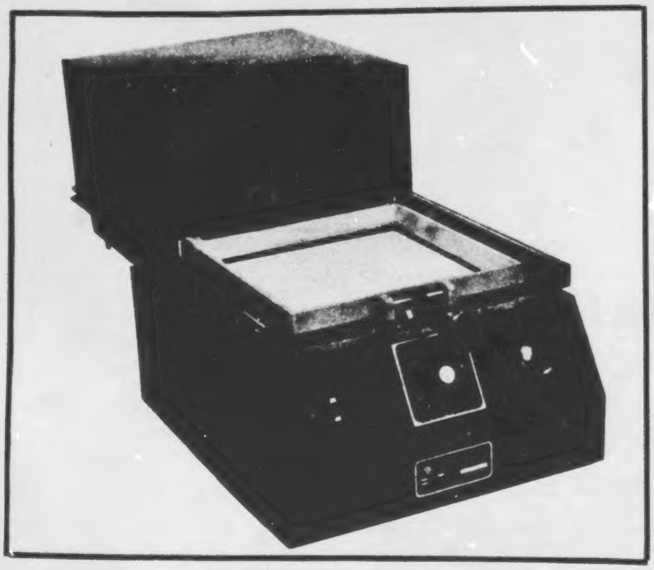
460's Stencil Duplicator	$2238.35
Plus Modification	$ 162.00
Stand (Optional)	$ 75.00

HOW IT WORKS

Push button and dial adjustments are all that is needed to produce duplicated materials. The stencils are loaded by applying the stencil head to the fastening studs and by turning a handle stencils are in place. Other printing equipment and supplies are available from this company.

(Information based on product brochures.)

THERMOFORM BRAILON^R DUPLICATOR



Photograph courtesy of
American Thermoform
Corporation

THERMOFORM BRAILON^R DUPLICATOR

DEVELOPER

American Thermoform
Corporation
8640 East Slauson Avenue
Pico Rivera, CA 90660

CONTACT PERSON

B. Hersh
8640 East Slauson Avenue
Pico Rivera, CA 90660
(213) 723-9021

WHERE IT IS USED

Reproduction of braille and embossed material

PROBLEM(S) IT OVERCOMES

copying braille material

FIELD TESTED

yes

in operation since 1961

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

American Thermoform Corporation
8640 East Slauson Avenue
Pico Rivera, CA 90660

duplicator $1240.00

F.O.B. Pico Rivera, CA

HOW IT WORKS

The machine plugs into a standard 115 volt, 60Hz outlet and needs 10 minutes to warm up. To copy material, the original is placed on the machine's platen with raised impression side up. A sheet of Brailon^R. (a paper-like plastic developed for use with this duplicator), is placed over the original and secured in place by the clamping frame. The heating oven is then pulled forward over the material to be copied, starting the automatic timer. In three to four seconds the vacuum pump starts automatically and the pump indicator light is illuminated. The oven is then pushed back to the rear position. The clamping frame is raised and the Brailon^R copy removed. Pressing the timer shut-off button stops the pump.

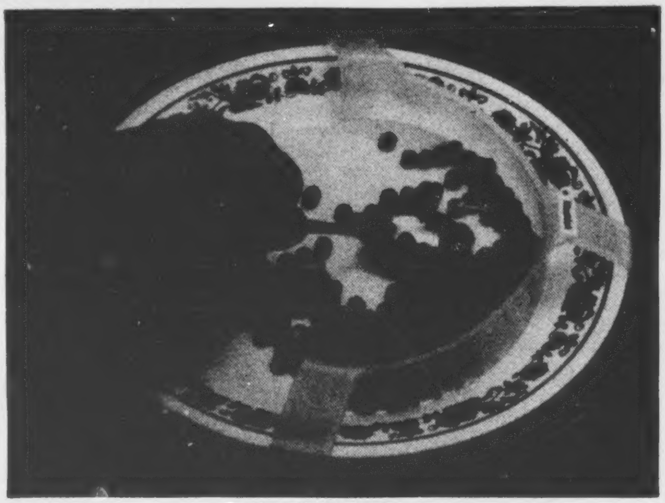
(Information based on American Thermoform Corporation literature.)

EATING

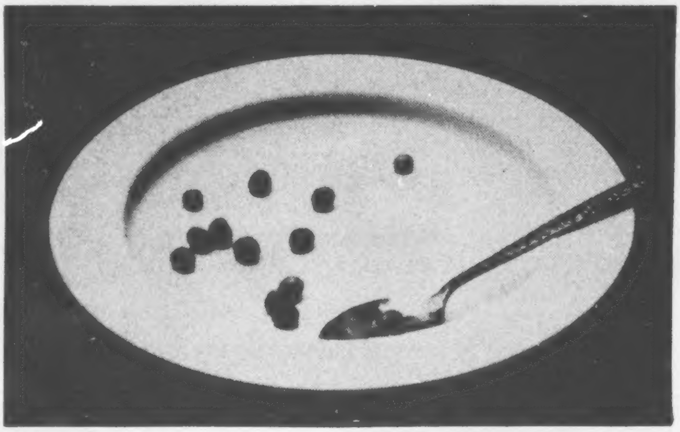
Plates and Cups 276

Utensils 278

PLATES AND CUPS

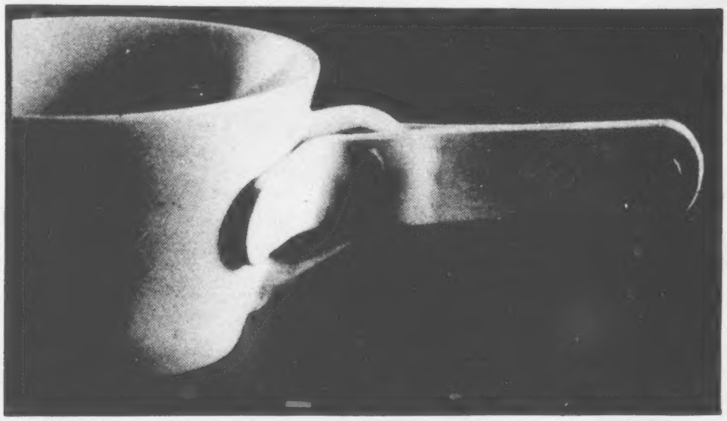


Food Bumper



Inner-Lip Plate

Plastic Cup Handle



Photographs courtesy of
Maddak, Inc.

PLATES AND CUPS

DEVELOPER

Manufactured by:
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

CONTACT PERSON

Fred M. Joslyn
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

WHERE IT IS USED

Eating
Personal Use

PROBLEM(S) IT OVERCOMES

limited manipulative ability; loss of one hand

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

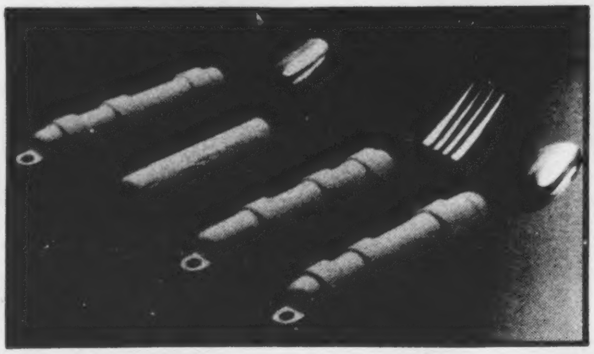
Maddak, Inc.
Pequannock, NJ 07440

Food Bumper	$ 3.00
Inner-Lip Plate	$ 3.25
Plastic Cup Handle	$15.00

HOW IT WORKS

The Food Bumper is a curved rail designed to keep food from sliding off the plate - even when eating with only one hand. It is made of autoclavable polypropylene with strong clips of the same material. Fits plates 9" to 11" in diameter. The Inner-Lip Plate is designed as an aid to self-feeding. The deep inner-lip prevents spills and makes eating more enjoyable. The plate is molded of smooth, durable polypropylene and is light weight, easy to clean and dishwasher safe. The Plastic Cup Handle is a strong plastic handle in 2 parts with plated metal rivet and screw for tightening onto standard cup handle. It provides a 3½" handle extension for easy grip.

(Information based on Maddak Catalog No. 479, 1979)



Adjustable, Easy Grip, Built-Up Handle Cuttlery

Plastic Utensil Hand Clip

Self-Leveling Swivel Utensils

Photographs courtesy of Maddak, Inc.

UTENSILS

DEVELOPER

Manufactured by:
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

CONTACT PERSON

Fred M. Joslyn
Maddak, Inc.
Pequannock, NJ 07440
(001) 694-0500

WHERE IT IS USED

Eating

PROBLEM(S) IT OVERCOMES

difficulty in grasping

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc.
Pequannock, NJ 07440

Built-up Handle Cuttlery	$14.95 (complete set)
Utensil Hand Clip	$ 3.00
Swivel Utensils	$ 6.90

HOW IT WORKS

The Adjustable, Easy Grip, Built-Up Handle Cuttlery are stainless steel utensils with secure lock-in handles. Two additional sizes of sleeves to increase the diameter of the handle are available. Handle is supplied with 3 movable grip rings to provide support against individual fingers. The Plastic Utensil Hand Clip fits the hand and holds a spoon or fork securely. The Self-Leveling Swivel Utensils are mounted in bicycle-type soft vinyl handles with hard plastic centers. The L shaped utensil handles are mounted on a central swivel pin which permits the utensil to remain level even though the handle is rotated through an arc of up to 60°. Double stops prevent excessive rotation or swing. Can be used with either right or left hand.

(Information based on Maddak Catalog No. 479, 1979.)

EDUCATION

Braille Atlases and Maps 282

Embossed and Bold-Line Graph Sheets . 284

Portable Magnetic Graphics Display Board 286

Vis-I-Con 288

Voxcom^R Slow-Speed Card Reader and Cassette Recorder 290

Photographs courtesy of
American Printing House
for the Blind

BRAILLE ATLASES AND MAPS

DEVELOPER

Manufactured by:
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206
(502) 895-2405

WHERE IT IS USED

Education

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

information not available

FOR SALE

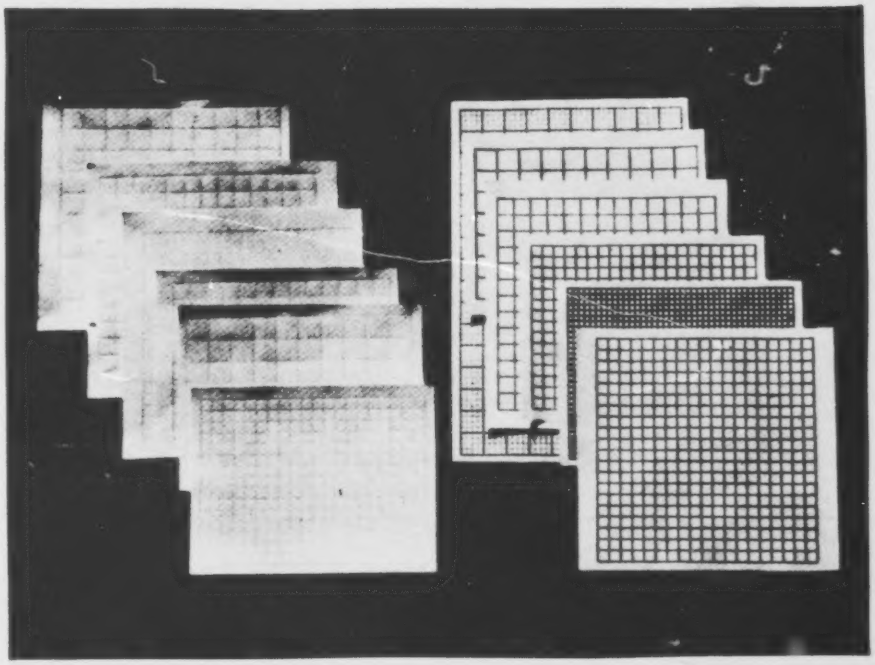
American Printing House for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

HOW IT WORKS

Various atlases and keys of the continents are available in braille on extra heavy white paper, size 17"x13". The pages are bound by plastic rings in pressboard covers. Also available are numerous maps and globes of the United States, continents, individual states, etc.

(Information based on American Printing House for the Blind literature.)

EMBOSSED AND BOLD-LINE GRAPH SHEETS



Photograph courtesy of
American Printing for the
Blind

EMBOSSED AND BOLD-LINE GRAPH SHEETS

DEVELOPER

Manufactured by:
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206
(502) 895-2405

WHERE IT IS USED

Education

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

information not available

FOR SALE

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

Price ranges from $1.25 to $1.75 for one package.

HOW IT WORKS

The Embossed Graph Sheets are standard 100 lb. manila sheets embossed with horizontal and vertical lines of small braille dots. Coordinate axes are represented as solid lines. They are available in two sheet sizes - 8½"x11" and 11½"x11". Three different line spacings of ½", 3/4" and 1" are provided in each sheet size. The Bold-Line Graph Sheets are designed for use by the partially sighted. Major unit lines are .03" wide and subunit lines are .015" wide. The sheets are available in three sizes - 8½"x11", 11½"x11 and 17"x11". In addition to these regular graph sheets, polar graph sheets showing 3 concentric circles with 1" spacing plus coordinate axes, are available.

(Information based on American Printing House for the Blind literature.)

PORTABLE MAGNETIC GRAPHICS DISPLAY BOARD

Photograph not available

PORTABLE MAGNETIC GRAPHICS DISPLAY BOARD

DEVELOPER

Clinical Convenience Products
Contracting Serv. Div.
2070 Helena Street
Madison, WI 53704
(608) 251-2882

CONTACT PERSON

Don Warren
2070 Helena Street
Madison, WI 53704

WHERE IT IS USED

Presenting and interpreting data graphically

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

unit being used by person it was designed for - instructor-professor

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Clinical Convenience Products
2070 Helena Street
Madison, WI 53704

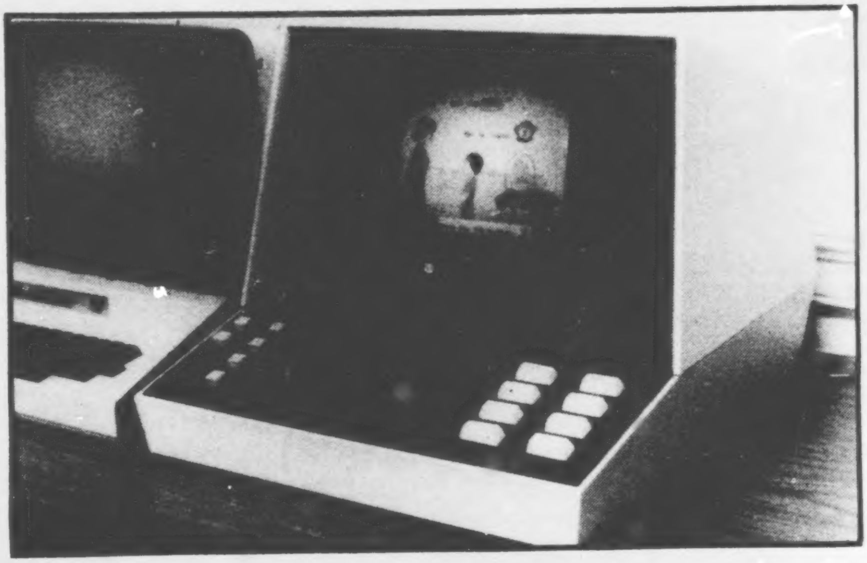
Price depends on size and configuration.

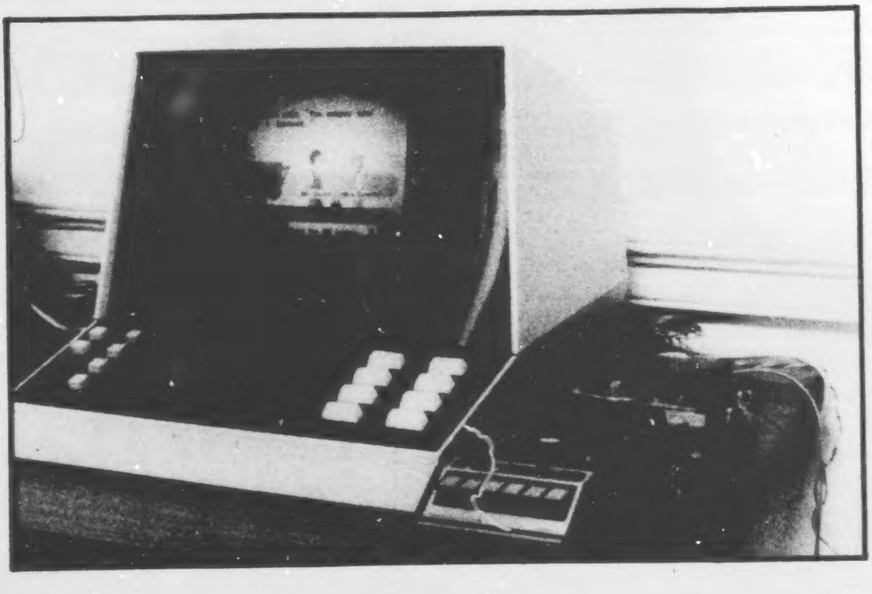
HOW IT WORKS

A 28" by 30" sheet of 20 gauge sheet metal was used to create a grid design using raised cells. Vertical and horizontal lines were drawn on the sheet to form a grid of one inch squares. The lines were then dented with a hammer and chisel to form raised ridges on the reverse side of the sheet metal. Every fifth line, both horizontal and vertical was made larger to allow for easier tactile identification. The side with the raised ridges of the grid was further accented by covering the raised lines with masking tape and spraying the metal surface with green chalkboard paint. The tape was then removed. The result was a green chalkboard with a one inch square grid pattern which was both visible and tactual. Magnetic rope, which is available commercially in either round or rectangular shapes, can be used to create graphs and intersecting curves. The rope can be broken to the desired length by hand, and can be shaped by hand to form curves or other desired shapes.

(Information provided by Ricardo Cerna, Rehabilitation Engineering Specialist, Wisconsin Division of Vocational Rehabilitation, and Don Warren.)

VIS-I-CON





Photographs courtesy of
Raymond G. Fox, Learning
Technical Institute

VIS-I-CON

DEVELOPER

Raymond G. Fox
Learning Technology
Institute
50 Culpeper Street
Warrenton, VA 22186
(703) 347-0055

CONTACT PERSON

Same As Developer

WHERE IT IS USED

Communication
Education
Reading

PROBLEM(S) IT OVERCOMES

hearing impairment

FIELD TESTED

no

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

Learning Technology Institute
50 Culpeper Street
Warrenton, VA 22186

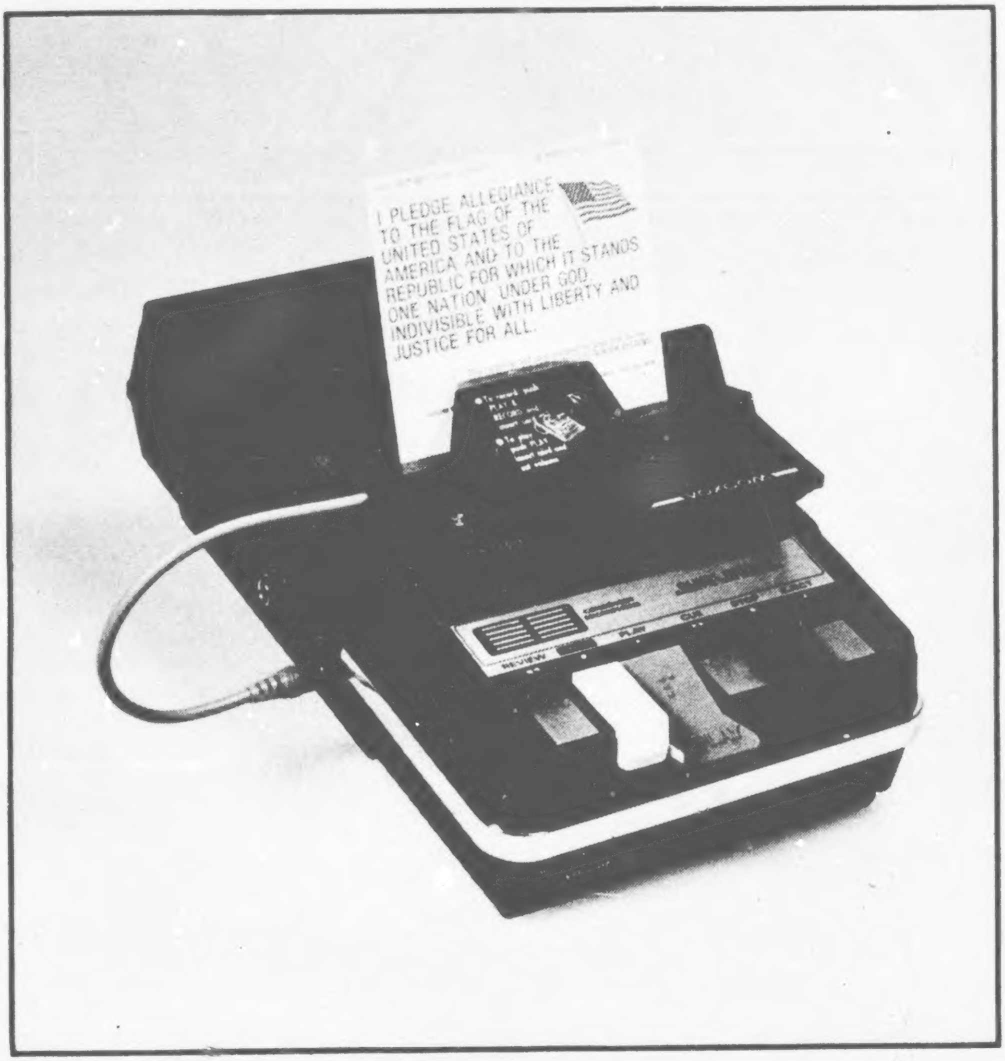
$2500 - $3500 depending upon quantity

HOW IT WORKS

The Vis-I-Con is a programmable micro-processor controlled interactive media-based instruction delivery system using super-8 film cassettes and addressable audio tape messages. It is designed to make available to deaf and hearing impaired learners delivery of a wide range of validated media-based instructional materials. The system consists of a frame addressable super 8 cassette, a rear screen projector, a programmable read-only memory for program instruction control and a micro-processor. The unit can function on a stand alone basis as an instruction delivery machine, as a computer terminal with bidirectional information transfer capability, or as a host system which can operate peripheral devices.

(Information provided by Raymond G. Fox, Learning Technology Institute.)

VOXCOM^R SLOW-SPEED CARD READER AND CASSETTE RECORDER


I PLEDGE ALLEGIANCE TO THE FLAG OF THE UNITED STATES OF AMERICA AND TO THE REPUBLIC FOR WHICH IT STANDS ONE NATION UNDER GOD, INDIVISIBLE WITH LIBERTY AND JUSTICE FOR ALL.
VOXCOM
REVIEW
PLAY

Photograph courtesy of Voxcom

VOXCOM^{R} SLOW-SPEED CARD READER AND CASSETTE RECORDER

DEVELOPER

VOXCOM
Division of Tapecon, Inc.
100 Clover Green
Peachtree City, GA 30269
(404) 487-7575

CONTACT PERSON

Bonnie Pray
VOXCOM
100 Clover Green
Peachtree City, GA 30269
(404) 487-7575

WHERE IT IS USED

Reading
Teaching

PROBLEM(S) IT OVERCOMES

difficulty in reading; difficulty retaining information

FIELD TESTED

yes

in schools around the world

REGULATORY APPROVAL

no

WARRANTY PROVIDED

yes

FOR SALE

VOXCOM
Division of Tapecon, Inc.
100 Clover Green
Peachtree City, GA 30269

or call for location of nearest dealer

HOW IT WORKS

Information can be simultaneously seen, read and heard with this unit. An adhesive-backed magnetic tape is applied to the back of any piece of paper, (e.g. the back of a photo). Information is recorded onto the magnetic tape and then played using the slow speed card reader adapter. By removing the adapter, the unit can be used as an ordinary cassette recorder. It can be used to teach math concepts, give machine operating instructions and for other similar applications.
One of the VOXCOM models has color-coded extender keys with braille and tactile markings for record, play and stop.

(Information based on VOXCOM catalog, 1980.)

ELECTRONICS

Aud-A-Simpson 294

Aud-A-Zilch 296

Impedance Bridge 298

Speech Adapters for Electronic Test Equipment 300

Talking Voltmeter 302

AUD-A-SIMPSON

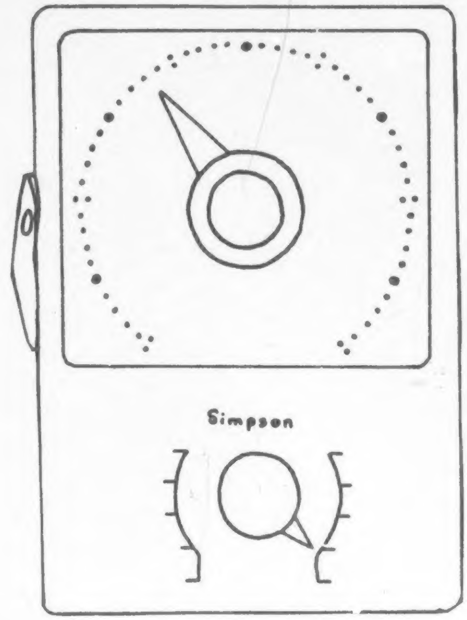


Illustration courtesy of
Science for the Blind
Products

AUD-A-SIMPSON

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind
Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

Lab Work
Technical Work

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

$155.00

HOW IT WORKS

The Aud-A-Simpson is a commercially available volt-ohm millimeter used for testing electronic equipment under repair or in student labs and in professional and amateur technical work. It measures DC and AC voltage, DC resistance and current, and the AC output of electronic equipment. As adapted by Science for the Blind, it has a braille scale and audio circuit in place of the meter, and a reading is obtained by turning the knob for a null. The meter comes complete with clip leads, a resistance conversion chart and an instruction booklet.

(Information based on Science for the Blind literature.)

AUD-A-ZILCH

Photograph not available

AUD-A-ZILCH

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind
Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

Electronics
Lab Work

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

$40.00

HOW IT WORKS

The Aud-A-Zilch is used to locate null (balance) setting for DC instruments such as the Impedance Bridge (p. 298), potentiometer, or other instruments with a zero balance point. It can also be used as an amplifier for balancing AC circuits or for trouble shooting in audio equipment or monitoring an SC signal.

(Information based on Science for the Blind literature.)

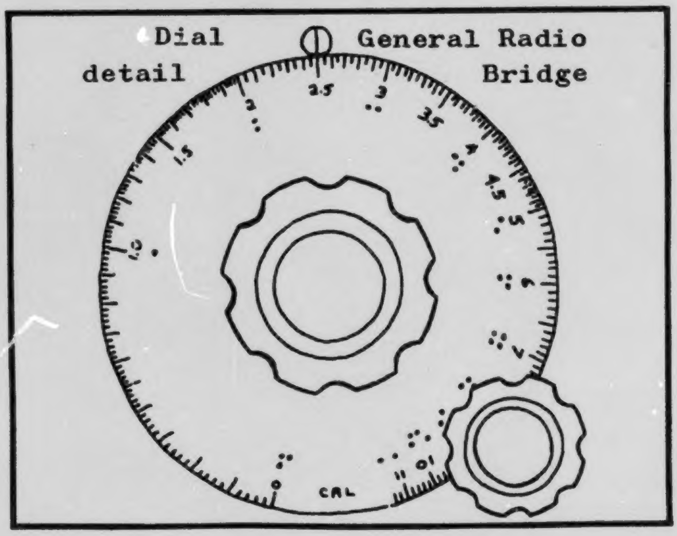

Dial detail
General Radio Bridge
1.0
1.5
2
2.5
3
3.5
4
4.5
5
6
7
0
CAL
10
11

Illustration courtesy of
Science for the Blind
Products

IMPEDANCE BRIDGE

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind
Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

Lab Work
Technical Work

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

$550.00

HOW IT WORKS

This device is used for measurement of components or repair of electronic equipment in student laboratories and professional technical work. It measures AC/DC resistance, inductance, capacitance, figure of merit Q of coil, and dissipation Factor D of capacitor. Accuracy: R 3%, C 3%, L 10%, D 20%, Q 20%. Cassette instructions included. Custom order item.

(Information based on Science for the Blind literature.)

SPEECH ADAPTERS FOR ELECTRONIC TEST EQUIPMENT

Photograph not available

SPEECH ADAPTERS FOR ELECTRONIC TEST EQUIPMENT

DEVELOPER

Sensory Interface
Equipment, Inc.
4442 Kasson Road
Syracuse, NY 13215
(315) 469-7182

CONTACT PERSON

Larry Waldron
Sensory Interface Equipment, Inc.
4442 Kasson Road
Syracuse, NY 13215
(315) 469-7182

WHERE IT IS USED

Electronics

PROBLEM(S) IT OVERCOMES

inability to see test equipment

FIELD TESTED

yes

Library of Congress - Washington, DC

REGULATORY APPROVAL

no

WARRANTY PROVIDED

yes

FOR SALE

Sensory Interface Equipment, Inc.
4442 Kasson Road
Syracuse, NY 13215

$945.00 The instrument to be modified can either be supplied by the purchaser or by SIE at current retail price.

HOW IT WORKS

Electronic test equipment has been adapted to provide speech in place of a visual reading. These are speech adaptations of a Digital Frequency Counter and a Digital Multimeter. These adapters can provide a variety of operating options such as: continuous speech, speech on demand, speech on reading change only, speech suppressed while reading is at 1, and a peak reading saving capability (peak reading can be spoken or cleared when desired). A Telesensory Systems speech board is used to provide clear and understandable spelled speech. Special adapters can be made for just about any device that has a digital output available. This includes devices with IEEE-488 (HP-IB) interface bus connections. The frequency counter is based on a B&K model 1801 counter. It covers 20hz to 40 mhz and is autoranging. It has excellent input sensitivity and is easy to use. The digital multimeter uses a FLUKE model 8020A DMM providing a good selection of volt, ohm, current, and conductance ranges with 0.1% accuracy. A variety of accessories including RF measurement, temperature measurement, high voltage and high current adapters are available.

(Information provided by Larry Waldron.)

TALKING VOLTMETER

Photograph not available

TALKING VOLTMETER

DEVELOPER

Sensory Interface Equipment, Inc.
4442 Kasson Road
Syracuse, NY 13215
(315) 469-7182

CONTACT PERSON

Larry Waldron
Sensory Interface Equipment, Inc.
4442 Kasson Road
Syracuse, NY 13215
(315) 469-7182

WHERE IT IS USED

Electronics

PROBLEM(S) IT OVERCOMES

inability to see voltmeter indicators

FIELD TESTED

yes

St. Mary's Junior College -
Minneapolis, MN

REGULATORY APPROVAL

no

WARRANTY PROVIDED

yes

FOR SALE

Sensory Interface Equipment, Inc.
4442 Kasson Road
Syracuse, NY 13215

$900.00

HOW IT WORKS

The talking voltmeter provides spoken output for a DC voltage input. It can be used to monitor an existing meter or a varying voltage. The unit is more accurate and easier to use than a nulling bridge type adapter. It has been used as an audible VU meter for audio levels and a readout on a diathermy machine for sightless technicians. The spoken output is from 0 to 199 corresponding to inputs of 0 to maximum. The input sensitivity for full scale can be set between 0.199 and 19.9 volts. Overrange alarms can be set at 125, 150 or 175 percent. The operator controls provide a variety of operating modes. Spoken output can be continuous or on demand. The unit can speak a reading once and then will be silent until the reading changes. An audible tone output is available that follows the input voltage (at 10 readings a second) allowing the meter to be used as a tuning indicator on rapidly varying voltages. The tone is digitally derived and is logarithmic, making changes easy to detect at both top and bottom of the range. The unit also has a PEAK memory that constantly monitors the input and records the highest value. It can be interrogated at any time and can be cleared to watch for the new peak. The unit is in a metal enclosure 10" wide by 8" deep by 3" high. The AC line input is well filtered. The DC measuring input is filtered for 60 decibels rejection at 60 Hertz.

(Information provided by Larry Waldron.)

ENVIRONMENTAL CONTROL

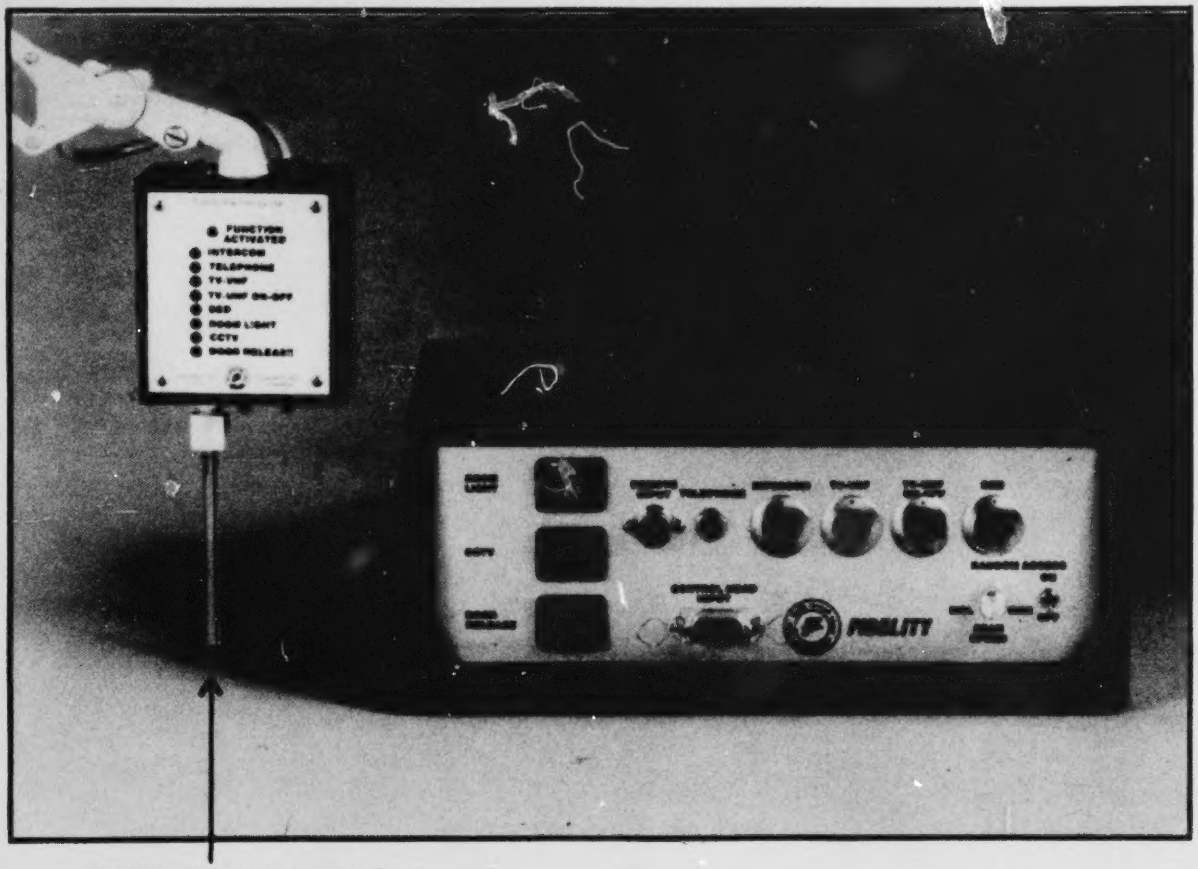
Comfort and Communication Control Systems 306

Du-It Wheelchair Control Systems 308

Environmental Control P.S.U. 4 310

Possum™ Input Controls 312

Visual Doorbell/Phone Signal 314


FUNCTION ACTIVATED
INTERCOM
TELEPHONE
TV-UHF
TV-UHF ON-OFF
BED
ROOM LIGHT
CCTV
DOOR RELEASE
FIDELITY

Random Access Control

Photograph courtesy of
Fidelity Electronics, Ltd.

COMFORT AND COMMUNICATION CONTROL SYSTEMS

DEVELOPER

Northwestern University
Rehabilitation Engineering Program
Evanston, IL 60201

CONTACT PERSON

Fidelity Electronics, Ltd.
8800 N.W. 36th Street
Miami, FL 33178
(305) 888-1000

WHERE IT IS USED

Communication
Independent Living

PROBLEM(S) IT OVERCOMES

some of the problems of communication and independent living experienced by severely disabled persons

FIELD TESTED

yes

Veterans Administration facilities

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Fidelity Electronics, Ltd.
8800 N.W. 36th Street
Miami, FL 33178

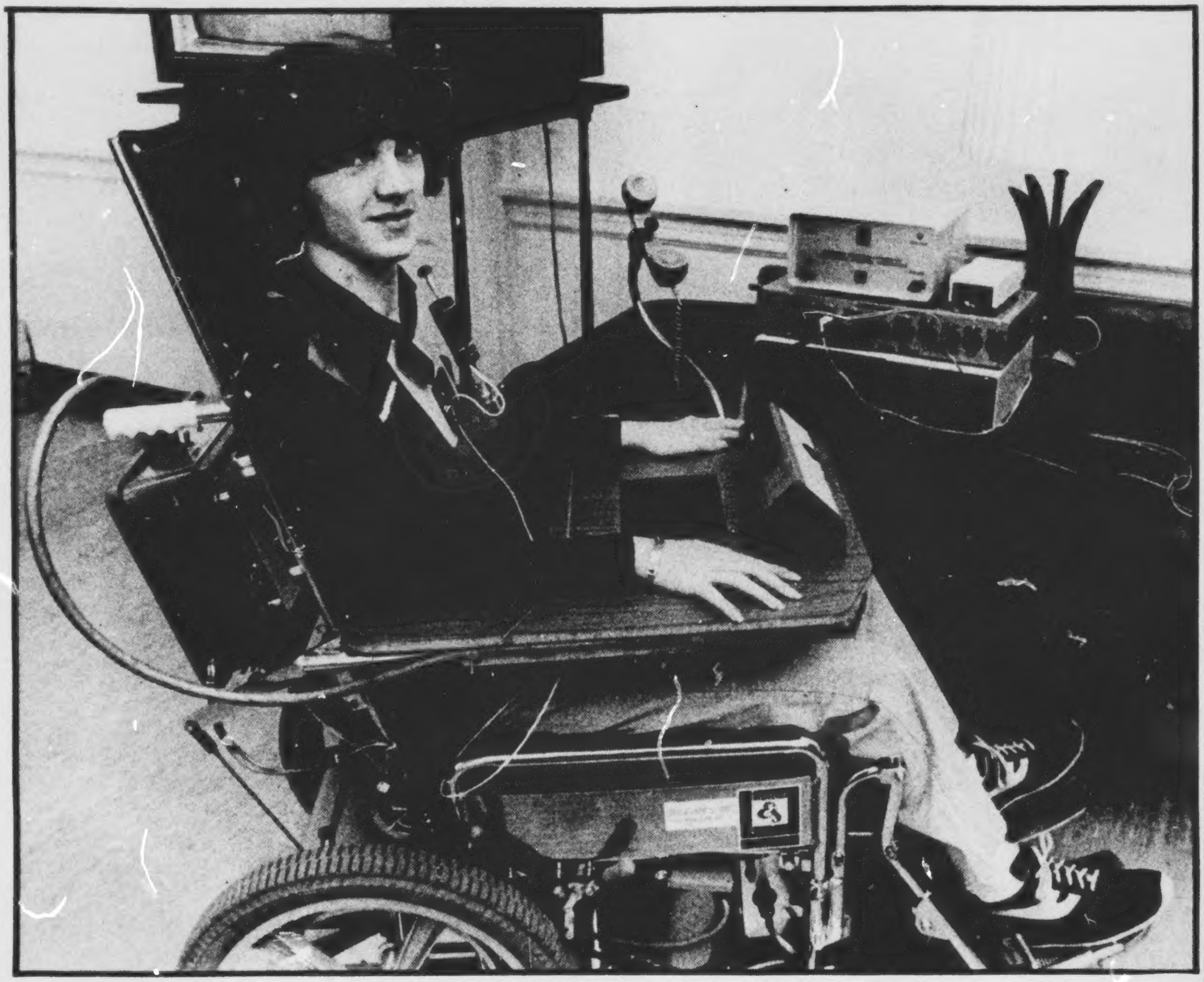
$1,495.00

HOW IT WORKS

This system is an eight-function, electronic control for severely handicapped persons. It provides access to and use of a telephone, control of a television set or radio, control of room lights, and other functions. Selection of a function is achieved by a puff on the tube attached to the control head. Activation of the function is achieved by a sip on the same tube. For example, after selecting the television function by a puff, the desired channel would be selected by a sip. Selection of function may be further simplified through the use of the Random Access Control. When placed in the "ON" position this control will cause a continuing rotation of the light-emitting diodes on the display panel of the control head. When the desired function is lit, a sip on the control tube will activate that function. Upon activation of the function, rotation will be resumed and other functions may be activated. Speed of rotation may be varied. Installation of the Fidelity Comfort and Communication Control System is simple and requires no special tools or equipment. The unit is compact and requires little space. The power unit may be placed under a bed or table. The solid-state, modular construction of the unit permits tailoring of the control features to the desires and needs of the individual.

(Information based on company literature.)

DU-IT WHEELCHAIR CONTROL SYSTEMS



Photograph courtesy of
Romich, Berry and Bayer,
Inc.

DU-IT WHEELCHAIR CONTROLS SYSTEMS

DEVELOPER

Romich, Berry and Bayer,
Inc.
RD 2, Box 191
Shreve, OH 44676
(216) 567-2906

CONTACT PERSON

David Bayer
Dick Beery
Romich, Beery and Bayer,
Inc.
RD 2, Box 191
Shreve, OH 44676
(216) 567-2906

WHERE IT IS USED

General Use
Operate other systems

PROBLEM(S) IT OVERCOMES

limited movement control

FIELD TESTED

yes

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

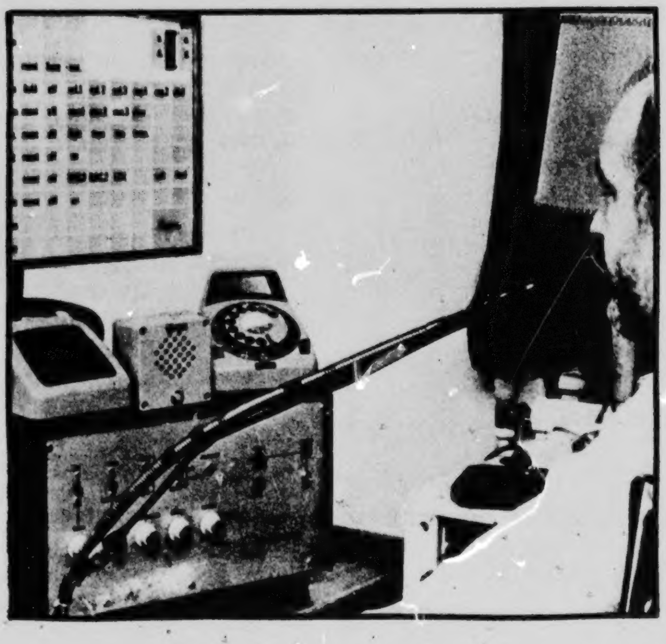
Romich, Beery and Bayer, Inc.
RD 2, Box 191
Shreve, OH 44676

$1000-$4000

HOW IT WORKS

Used with conventionally powered wheelchairs, the DU-IT wheelchair control systems are designed to provide effective wheelchair control schemes for persons who have a high level spinal cord injury, where few physical movements remain but fine motor control is intact, and for persons who have severe cerebral palsy where gross, imprecise, spastic (though repeatable) movements are available. There is a SCI and a CP class of wheelchair control systems. There is a choice of input devices for controlling these systems, e.g. chin, joystick, armslot, puff-sip. Many of the systems provide means for operating a multitude of auxiliary functions - remote control, power recline, tape recorder, typing, etc., (see Easicorder p. 256 and Typing and Computer Interface p. 240).

(Information provided by David M. Bayer, Romich, Beery and Bayer, Inc.)



Photograph courtesy of Possum
Controls, Inc.

ENVIRONMENTAL CONTROL P.S.U. 4

DEVELOPER

Possum Controls, Inc.
11 Fairacres Industrial Estate
Windsor Berkshire
England

CONTACT PERSON

Ann F. Gurr
Possum, Inc.
P.O. Box 451
Midwood Station
Brooklyn, NY 11230
(212) 243-1658

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

restricted mobility

FIELD TESTED

yes

Britain

REGULATORY APPROVAL

FDA

WARRANTY PROVIDED

yes

FOR SALE

Possum, Inc.
P.O. Box 451
Midwood Station
Brooklyn, NY 11230

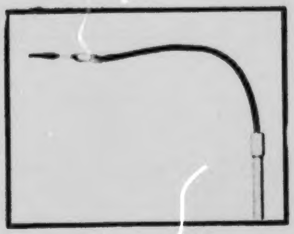
Price dependent on individual system requirements $400 - $7,000 range.

HOW IT WORKS

The system consists of an indicator panel, an electronic control unit and an operating switch which controls up to 11 functions in one or several rooms using one input. (See Possum™ Input Controls (p. 312) for types of input switches.) The indicator panel has 12 squares, one labeled 'start' and 11 labeled with the needed functions. Depressing the operating switch, (a microswitch controlled with a body part or a mouth controlled pneumatic flexitube), causes the white scanning light on the indicator panel to travel downward from the 'start' position then across the panel until the user stops the light at the selected function. The light will then return to 'start' and a red light will come on in the selected square and the function is activated (e.g. a lamp is turned on). The process is repeated to switch the activated function off. If a person moves to another room, all functions from the previous room are switched off and a new set of functions become controllable in the new room.

(Information based on Possum Controls, Inc. literature.)

POSSUM™ INPUT CONTROLS



Flexitube

Paddle Switches

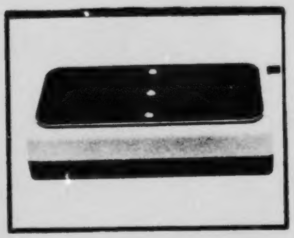
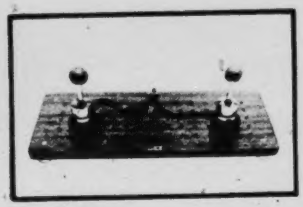
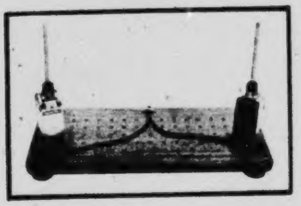


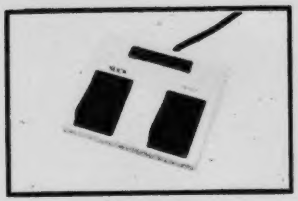
Plate Switch



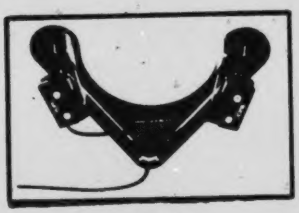
Wobblesticks



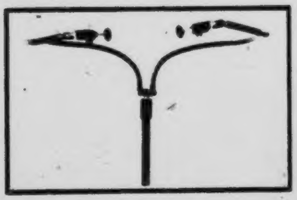
Spring Wobblesticks



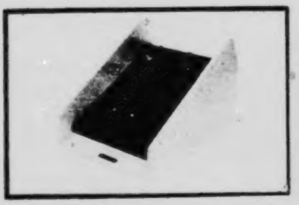
Danavox Switch



Neck Halter



Bifurcated Flexitube



Heavy Duty Foot Switches

Photograph courtesy of Possum Controls, Inc.

POSSUM™ INPUT CONTROLS

DEVELOPER

Possum Controls, Inc.
111 Fairacres Industrial Estate
Windsor Berkshire
England

CONTACT PERSON

Ann F. Gurr
Possum, Inc.
P.O. Box 451
Midwood Station
Brooklyn, NY 11230
(212) 243-1658

WHERE IT IS USED

Operate Equipment

PROBLEM(S) IT OVERCOMES

controls operated by person's residual movements

FIELD TESTED

yes

Britain

REGULATORY APPROVAL

FDA

WARRANTY PROVIDED

yes

FOR SALE

Possum, Inc.
P.O. Box 451
Midwood Station
Brooklyn, NY 11230

HOW IT WORKS

Flexitube on microphone stand - free standing, operated through pressure and suction equivalent to blowing bubbles or sucking a straw, can be mounted on bed or wheelchair.

Paddle Switches - light action microswitch with paddle lever mounted on a board or unmounted for special positioning.

Plate Switch - large contact area activated through light pressure to the surface which is divided in two, each half operating as a single switch. Single version also available.

Wobblesticks - operated by knocking them in any direction, useful for gross random movements. Spring Wobblesticks have springs along sticks' length to prevent injury.

Danavox Switch - used with hand or foot, needs harder pressure than other inputs.

Neck Halter - one or two light action microswitches mounted for chin operation, microswitch position individually adjustable.

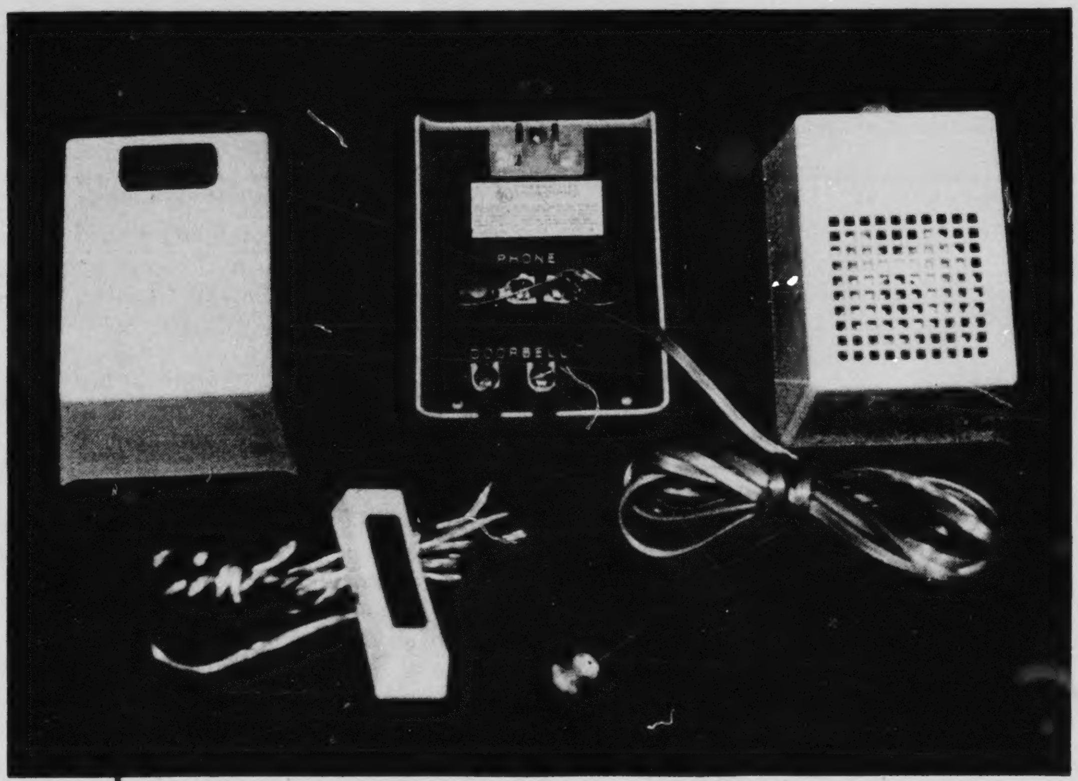
Bifurcated Flexitube with microswitches on microphone stand - free standing, operated with side to side head movement, light action microswitches, single ones also available.

Heavy Duty Foot Switches - sturdy switches mounted on an angled bracket on a board for gross movement.

(Information based on Possum Controls, Inc. literature)

See Typewriter Control Systems (p. 650), Environmental Control (p. 310), Communicator (p. 164) and Page Turner (p. 568) for Possum systems using these inputs.

VISUAL DOORBELL/PHONE SIGNAL


PHONE
DOORBELL

Switched Receptacle

Photograph courtesy of
Howard M. Haines

VISUAL DOORBELL/PHONE SIGNAL

DEVELOPER

Nationwide Flashing Signals System
P.O. Box 6146
Silver Spring, MD 20906
(301) 593-2755

CONTACT PERSON

Howard M. Haines
Nationwide Flashing Signals System
P.O. Box 6146
Silver Spring, MD 20906
(301) 593-2755 (voice)
(301) 593-2566 (TTY)

WHERE IT IS USED

- Home Economics
- Homemaking
- Office Settings

PROBLEM(S) IT OVERCOMES

inability of a hearing impaired or deaf person to hear an audible signal

FIELD TESTED

yes

REGULATORY APPROVAL

UL; FCC

WARRANTY PROVIDED

yes

FOR SALE

Nationwide Flashing Signals System
P.O. Box 6146
Silver Spring, MD 20906

$98.95

HOW IT WORKS

When the doorbell or phone signal is activated, a transmitter will send a signal to the switched receptacle. The lamp (plugged into switched receptacle) in any room will flash to alert you to the phone ringing, no matter where the phone is. When the doorbell is ringing, it will flash in any room. Even if you are in bed, a bed vibrator (plugged into switched receptacle) will awaken you from either doorbell or phone signal. You can distinguish between the flashing codes representing the telephone and doorbell. No two flashing codes will be the same and no two switched receptacles will activate at the same time.

A switched receptacle can be moved from room to room. Or use as many switched receptacles as necessary to receive signals from one transmitter. It requires no wires for installation.

If you move to another town, you can take the entire system with you as easily as you installed it.

A USOC jack is provided by the telephone company. To connect the modular line cord clip into USOC jack, no tools are required.

Note: If your hearing-impaired neighbors in the same apartment building or on the same street wish to have independently operating systems, different channels should be ordered. Different channels will not interfere with similar units in the neighborhood. A single function product for either phone or doorbell is also available.

(Information based on company literature.)

FOOD PREPARATION

Electric Fry Pan Handle 318
Kitchen Aids 320
Potato Peelers 322

ELECTRIC FRY PAN HANDLE

Photograph courtesy of
Adaptive Designs

ELECTRIC FRY PAN HANDLE

DEVELOPER

B. Portnoy Levine
Adaptive Designs
126 Knoll Drive
Hamden, CT 06518
(203) 288-2801

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Home Economics
Homemaking

PROBLEM(S) IT OVERCOMES

lack of fine fingertip control and or lack of finger strength

FIELD TESTED

information not available

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

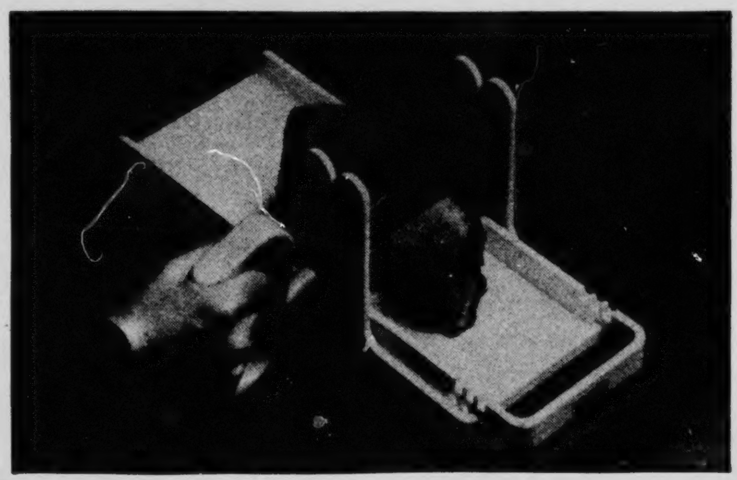
Adaptive Designs
126 Knoll Drive
Hamden, CT 06518

$25.00

HOW IT WORKS

This handle attaches over the existing control knob of an electric fry pan (with a set screw it will fit a range of circular knobs from 1" D to 2" D). User grasps protruding rod and moves it concentrically to turn controls. The handle is transparent so fry pan on and off light remains visible. The entire arm can be used to turn the control with this handle.

(Information provided by B. Portnoy Levine.)



The Slicing Knife

The Pan Holder

Photographs courtesy of
Maddak, Inc.

KITCHEN AIDS

DEVELOPER

Manufactured by:
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

CONTACT PERSON

Fred M. Joslyn
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

WHERE IT IS USED

Food Preparation
Home Economics
Homemaking

PROBLEM(S) IT OVERCOMES

lack of hand strength; loss of one hand

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

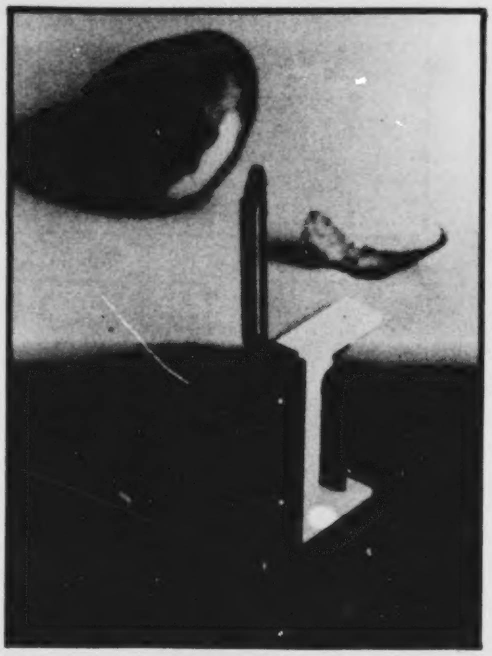
Maddak, Inc.
Pequannock, NJ 07440

Slicing Knife	$15.00
Pan Holder	$ 8.50

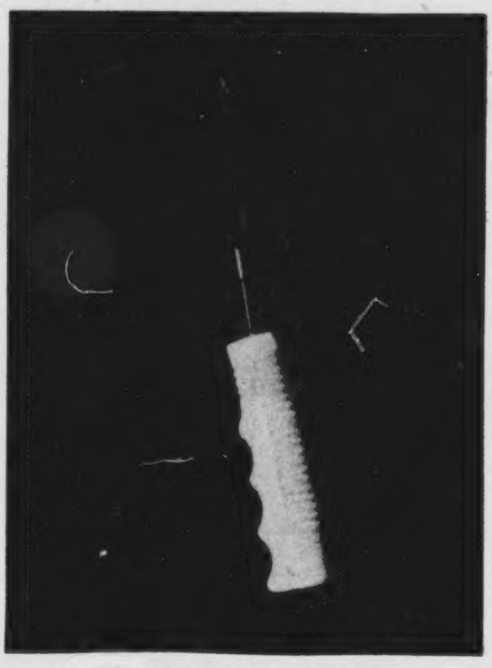
HOW IT WORKS

The Slicing Knife has a molded polypropylene saw-type handle which makes better use of hand strength and is more comfortable to use. The knife is tapered to a pointed end and is serrated along its length. The Pan Holder is an epoxy coated steel wire frame which attaches to the stove top by suction cups. Placing the handle of a cooking pot into the vertical slot keeps the pot from slipping during stirring operations. Contents can be stirred with one hand.

(Information based on Maddak Catalog No. 479, 1979.)



Potato Peeler



Hand Held Potato Peeler

Photographs courtesy of
Maddak, Inc.

POTATO PEELERS

DEVELOPER

Manufactured by:
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

CONTACT PERSON

Fred M. Joslyn
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

WHERE IT IS USED

Food Preparation
Home Economics
Homemaking

PROBLEM(S) IT OVERCOMES

lack of hand strength; loss of one hand

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc.
Pequannock, NJ 07440

Potato Peeler	$10.80
Hand Held Potato Peeler	$ 5.25

HOW IT WORKS

The Potato Peeler is a double edged potato peeler mounted in a durable metal clamp for temporary attachment to a table top or cutting board. User holds the potato in one hand and slides it against the blade. The Hand Held Potato Peeler is a standard slot type potato peeler mounted in a bicycle-type handle with finger grip knobs. It has a resilient vinyl handle which provides a good grip.

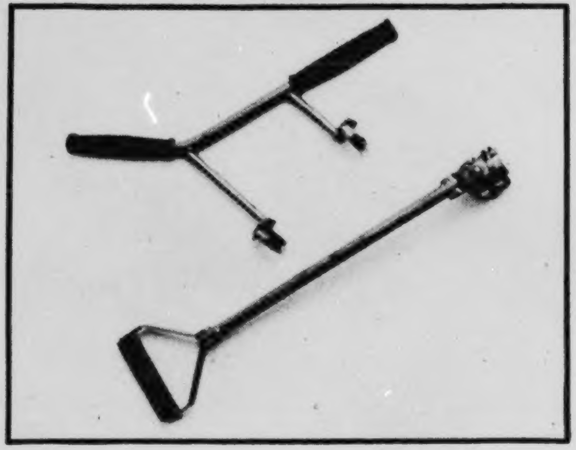
(Information based on Maddak Catalog No. 479, 1979.)

GARDENING

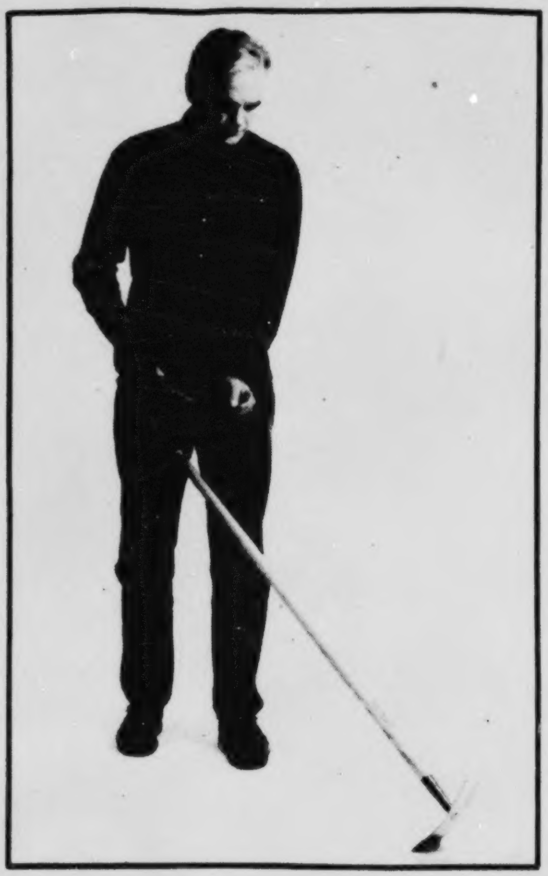
Back Preserver Tools 326
Earth Puncher and Spacer 328
Modified Hoe 330

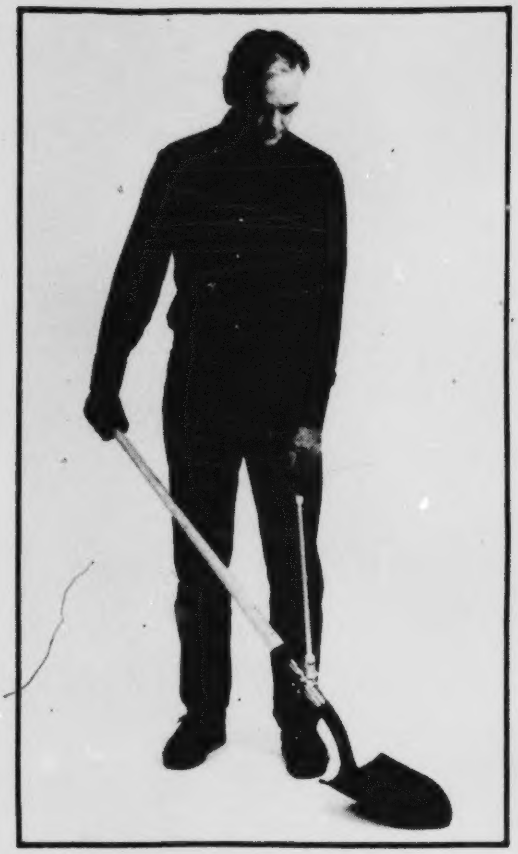
BACK PRESERVER TOOLS

Hoe Adapter
(top and left)



Shovel Adapter
(bottom and right)





Photographs courtesy of
Charles M. Searles

BACK PRESERVER TOOLS

DEVELOPER

Charles M. Searles
Marco Products
1259 El Camino Real
Suite 202
Menlo Park, CA 94025
(415) 326-6997 (work)
(415) 325-6581 (home)

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Common Tools

PROBLEM(S) IT OVERCOMES

weak, or restricted back movement; excessive back strain

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

Marco Products
1259 El Camino Real
Menlo Park, CA 94025

shovel, spade, or garden fork attachment	$19.85
hoe, rake, push broom, sponge mop attachment	$14.95

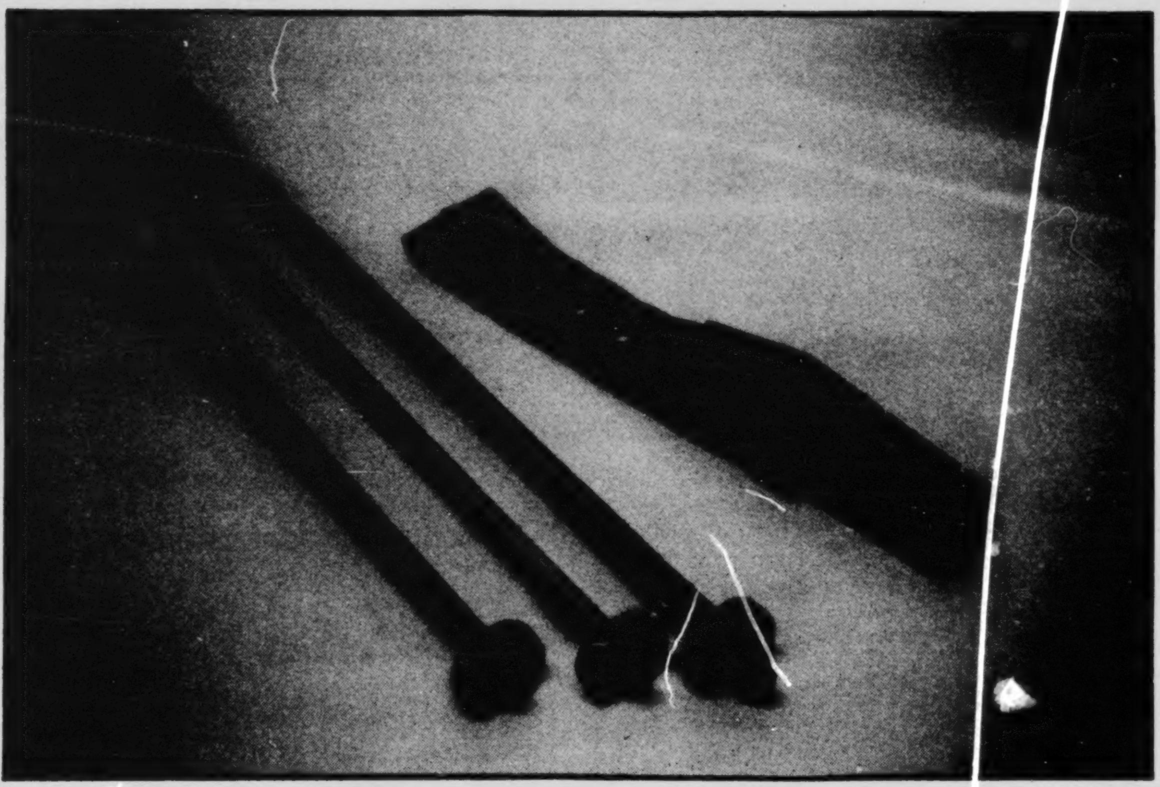
HOW IT WORKS

The shovel (spade, garden fork, etc.) attachment is connected in a way that enables it to swing in all directions making it easy to turn, swing or lift the tool. Digging or spading becomes much less tiring because the attachment, in effect, allows a person to hold the tool close to the weight without bending over. A simple twist of the wrist that holds the Back Preserver handle will cause the blade to dump its contents. It can be moved up or down the tool handle to adjust for height or removed to attach to another tool.

The hoe (rake, push broom, sponge mop, etc.) attachment is designed so that the constant upward and downward pressure that is normally associated with working these tools can be done while standing erect instead of stooping over in a tiring position. It also adjusts on the handle to compensate for height and can be moved to different tools.

(Information based on product news release.)

EARTH PUNCHER AND SPACER



Photograph courtesy of
Dr. William H. Kern

EARTH PUNCHER AND SPACER

DEVELOPER

Kern-Wolf-McBride

CONTACT PERSON

Dan Brown
Spectrum Industries
131 N. Third Street
Terre Haute, IN 47809
(812) 238-1581

WHERE IT IS USED

Horticulture

PROBLEM(S) IT OVERCOMES

students with severe brain damage were found to be unable to use the hoe because they were unable to walk backwards; with these tools brain injured students can walk forward and prepare place for seeds

FIELD TESTED

yes

Terre Haute, IN

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

no

FOR SALE

Spectrum Industries
131 N. Third Street
Terre Haute, IN 47809

Earth puncher	$2.60 each
Set of three	$7.80
Seed spacer - 6 ft. long	$3.00 each

HOW IT WORKS

Earth punchers - color coded green, yellow, red, have a guard and set screw which can regulate length of puncher which determines depth of hole for planting. With these tools it is unnecessary to use a hoe to make the trench. Hole is merely punched into the ground. (Meant to be used with seed spacer.)

A seed spacer is a strip of canvas suspended between two wooden stakes. Holes are punched in the canvas and when placed on the ground, the earth puncher is pushed through the holes to make holes for the planting of seeds at proper depth and spacing. Each spacer has holes at different distances such as one-half inch, one inch, two inches and so on.

(Information provided by Dr. William H. Kern.)

MODIFIED HOE

Photograph courtesy of
Dr. William H. Kern

MODIFIED HOE

DEVELOPER

Kern-Wolf-McBride

CONTACT PERSON

Dan Brown
Spectrum Industries
131 N. Third Street
Terre Haute, IN 47809
(812)238-1581

WHERE IT IS USED

Horticulture

PROBLEM(S) IT OVERCOMES

mentally retarded persons working in garden were unable to handle hoe to make trench to proper depth

FIELD TESTED

yes

Terre Haute, IN

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

no

FOR SALE

Spectrum Industries
131 N. Third Street
Terre Haute, IN 47809

Each	$15.80
Set of three - 1/2", 1", 2"	$47.40

HOW IT WORKS

Hoes are modified so no sharp edges are present. Hoes are color coded so that green hoe has guard one-half inch from end of blade, yellow hoe has guard two inches from end of blade. Mentally retarded students are taught to use hoe to make trenches by always sinking the blade up to the guard, thus by controlling which hoe students use the depth of trench can be controlled.

(Information provided by Dr. William H. Kern.)

GENERAL

Accru-Hook™ 334

Audicator with Accessories 336

Bookshelf, Sliding 338

Circular Lazy-Susan for Looseleaf Notebooks 340

Collapsible Lap Tray 342

File Tray, Quad-Operational 344

Heyer-Abadie "Talking" Mouthstick . . 346

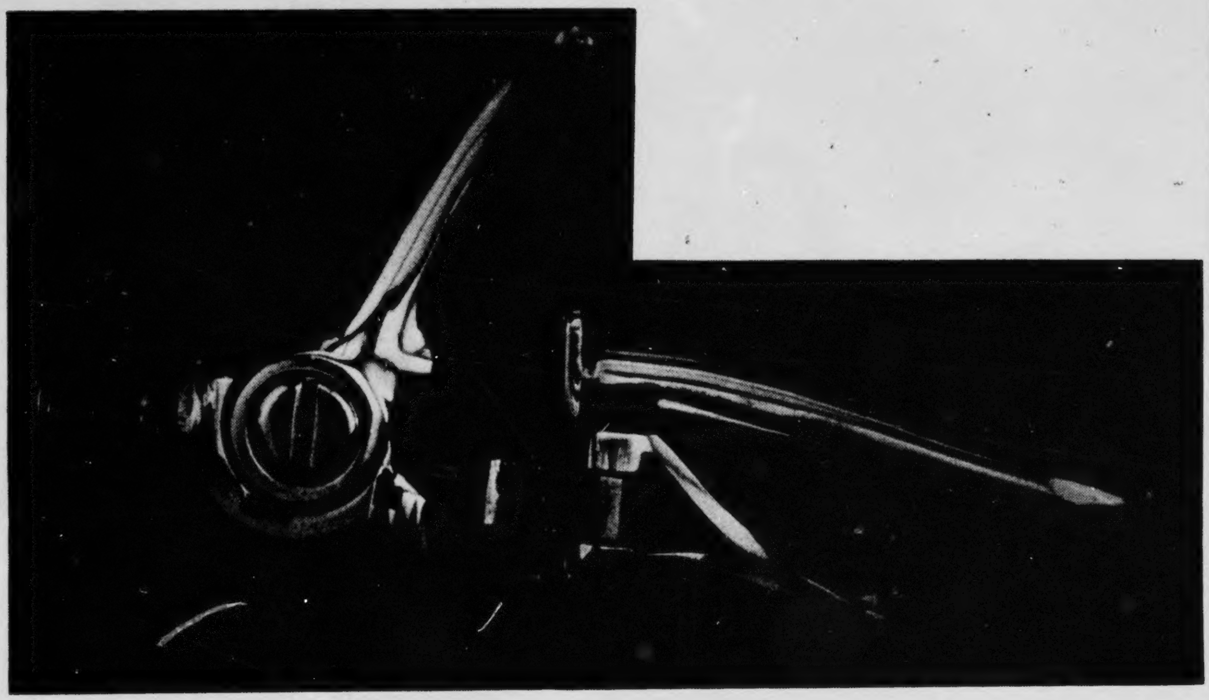
Prehensile Hand 348

Wheelchair Tray 350

Wheelchair Tray 352

Width Varying Device for Wheelchairs 354

ACCRU-HOOK™



Photographs courtesy of
M-W Enterprises, Inc.

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ACCRU-HOOK™

DEVELOPER

Co-Inventor:
Jerry Whitehead
P.O. Box 121
Kellwood Drive
Trenton, TN 38382

CONTACT PERSON

Jun. K. Wong
Managing Director
M-W Enterprises, Inc.
P.O. Box 121, Kellwood Dr.
Trenton, TN 38382
(901) 855-0222

WHERE IT IS USED

Agriculture
Construction
Machine Trades
and others

PROBLEM(S) IT OVERCOMES

hand or arm amputation

FIELD TESTED

yes

REGULATORY APPROVAL

yes

Veteran's Administration of the U.S. and Canada

WARRANTY PROVIDED

yes

FOR SALE

M-W Enterprises, Inc.
P.O. Box 121, Kellwood Drive
Trenton, TN 38382

Accru-Hook	$110.00
Universal Adapter	$9.00

HOW IT WORKS

The Accru-Hook contains a triangular hole in the fixed lower finger of the prosthesis. A separate, matching adapter is permanently attached to each tool to be used by the amputee. To pick up the tool, one merely slides the Accru-Hook onto the adapter. A simple locking lever secures the Accru-Hook to the tool and provides a drop-proof method of holding cameras, guns and other delicate equipment. It is made of 17/4 PH stainless steel, weighs 7 ounces, and has a tensile strength in excess of 120,000 PSI. The fingers are lined with Hypalon rubber and the base is threaded ½"-20. The hook is available in both right and left hand models.

(Information based on M-W Enterprises, Inc. literature.)

AUDICATOR WITH ACCESSORIES

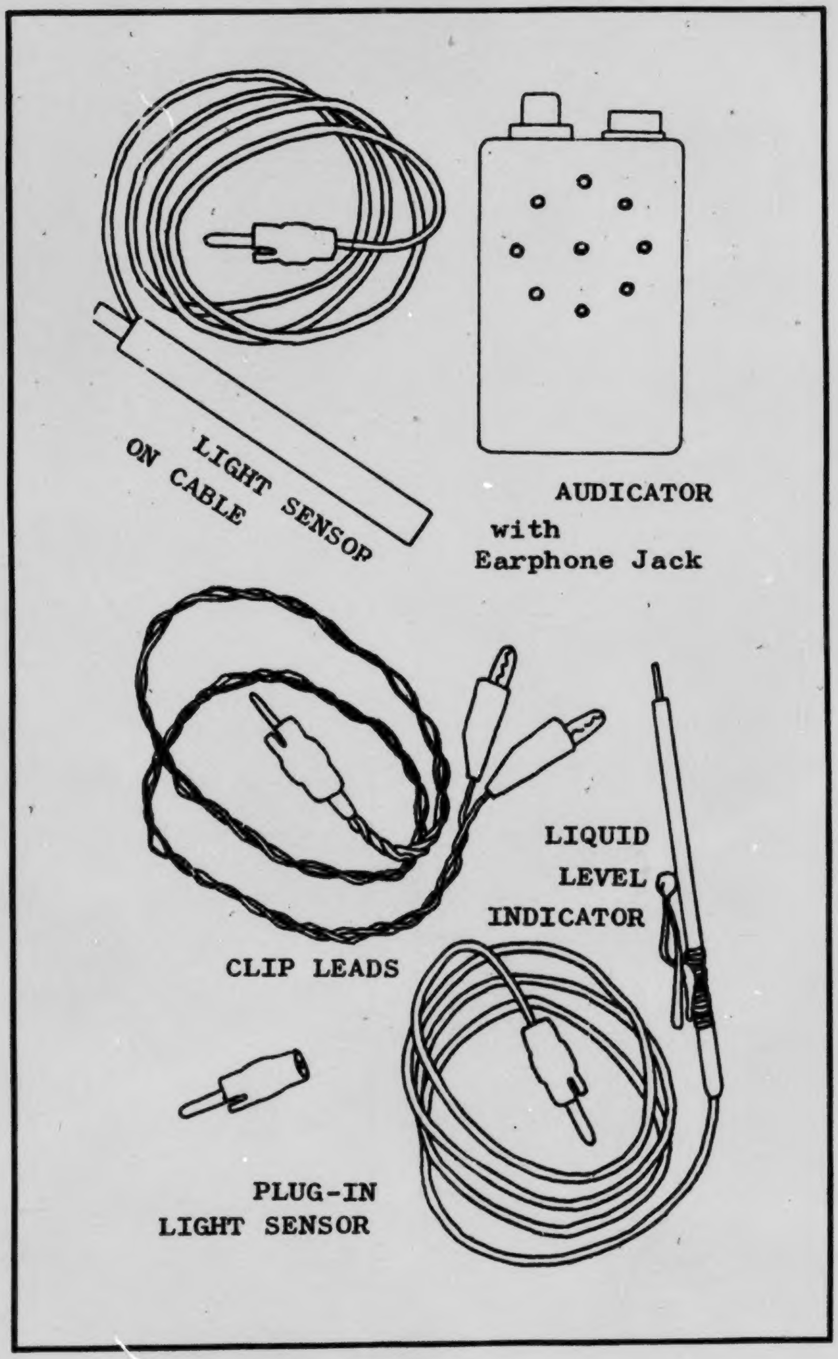

LIGHT SENSOR
ON CABLE
AUDICATOR
with
Earphone Jack
LIQUID
LEVEL
INDICATOR
CLIP LEADS
PLUG-IN
LIGHT SENSOR

Illustration courtesy of Science for the Blind Products

AUDICATOR WITH ACCESSORIES

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind
Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

Business
Home
Lab Work

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

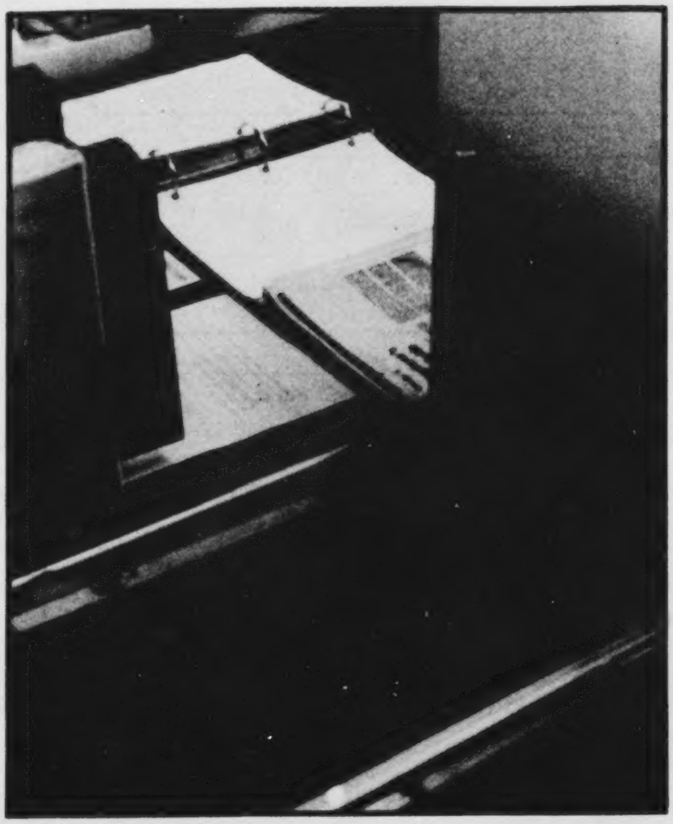
FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

HOW IT WORKS

Various accessories are used with a sound source housed in a small box to perform a number of different operations:
Liquid Level Indicator - for pouring to a pre-set level. 2 probes are available, 4" long and 10" long.
Clip Leads - checks electronic components, fuses, light bulbs, electrical appliances and circuits.
Plug-in Light Sensor - for checking light sources from a distance.
Light Sensor on Cable - for monitoring telephone lights and other lights.
An earphone jack is built into the Audicator to provide operation inaudible to others in the room.

(Information based on Science for the Blind literature.)



Photographs courtesy of
Don Simms

BOOKSHELF, SLIDING

DEVELOPER

Don Simms, Counselor
2125 S.W. 4th Avenue
Suite 514
Portland, OR 97201
(503) 229-5906

CONTACT PERSON

Same as Developer

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

difficulty experienced by people with limited hand functioning and or limited reaching ability; limited strength and weak grip in using heavy books conveniently

FIELD TESTED

yes

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

no

HOW IT WORKS

Bookshelf is built by carpenter to specifications of the job, i.e. specific needs for shelf sizes and number of shelves; size of desk, weight of shelf and contents need to be taken into account. The bookshelf is mounted on two "accuride" drawer "slides" (similar to those used in file cabinets. These can be found in builders' hardware stores and catalogs). The "slides" are secured to desk via bolts and the bookshelf "fitted" onto the slides. It is important to double check the stress on the "slides" when bookshelf is extended and to block off to prevent from extending out too far. The total cost for production - $75-100.

(Information provided by Don Simms.)

CIRCULAR LAZY-SUSAN FOR LOOSELEAF NOTEBOOKS

Photograph not available

CIRCULAR LAZY-SUSAN FOR LOOSELEAF NOTEBOOKS

DEVELOPER

3M Company
Maintenance Staff
St. Paul, MN 55101

CONTACT PERSON

information not available

WHERE IT IS USED

Bookkeeping

PROBLEM(S) IT OVERCOMES

limited use of hands and arms to reach over extended areas

FIELD TESTED

not applicable

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

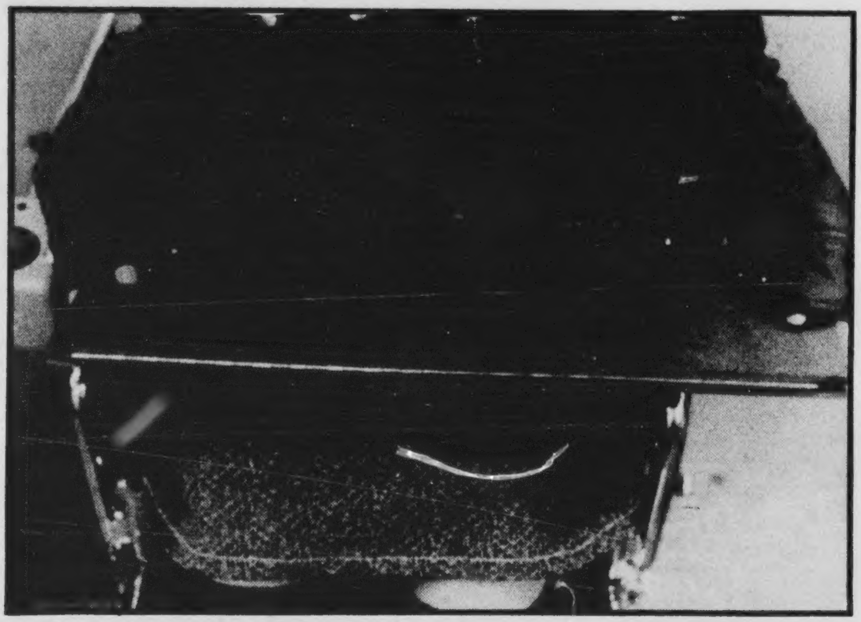
FOR SALE

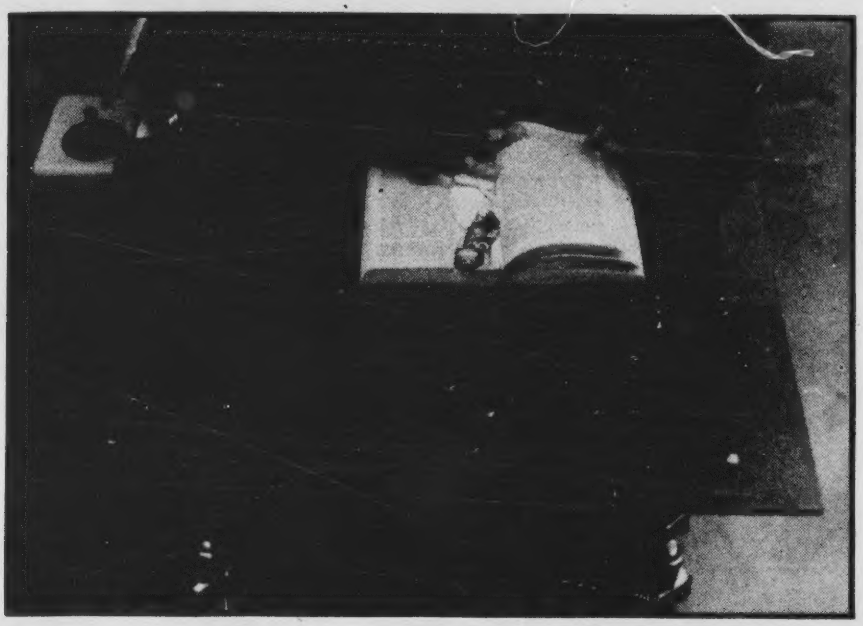
May be made at a minimal cost.

HOW IT WORKS

Developed for an employee who is partially paralyzed and has limited use of both arms, the lazy-susan has clips which hold books upright or can be easily removed as needed by co-workers. While a book is still engaged on the lazy-susan the user can tilt it to a convenient opening and close the book with one hand when no longer in use.

(Information provided by Paul C. Ashton, 3M.)





Photographs courtesy of Bob Warren

COLLAPSIBLE LAP TRAY

DEVELOPER

Bob Warren J.A.
United Cerebral Palsy of
Akron
318 Water Street
Akron, OH 44308
(216) 376-6041

CONTACT PERSON

Same as Developer

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

inconvenience of transporting and locating file drawers and other reference material

FIELD TESTED

yes

United Cerebral Palsy - Akron, OH

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

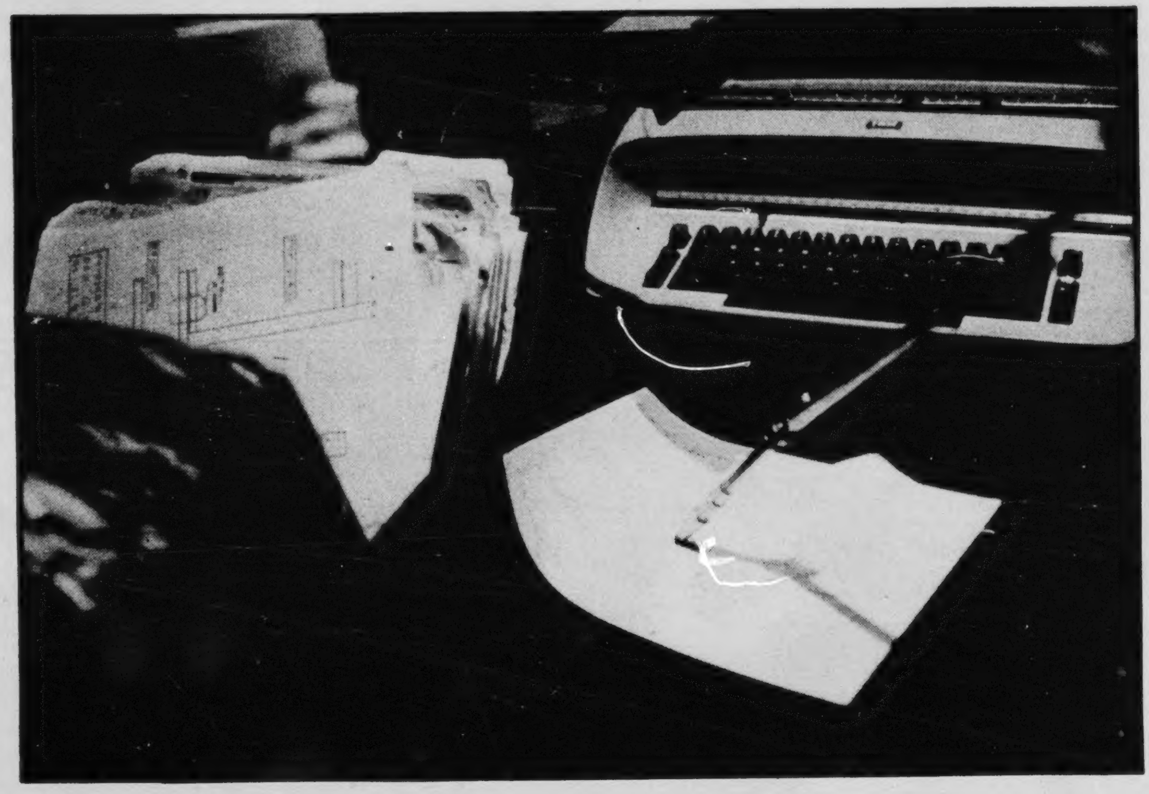
no

HOW IT WORKS

The device is a collapsible lap tray, designed for simple access and easy storage on the rear of a wheelchair. It is light, attaches easily to the arms on the sides of a wheelchair, yet is strong enough to support steel file card drawers and other reference material. The design of the tray also permits access through doorways and aisleways.

(Information provided by Bob Warren, UCP.)

FILE TRAY, QUAD-OPERATIONAL



Photograph courtesy of
Arthur Heyer

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FILE TRAY, QUAD-OPERATIONAL

DEVELOPER

Arthur Heyer
Extensions for Independence
P.O. Box 3754
Downey, CA 90242
(213) 862-2704

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Filing

PROBLEM(S) IT OVERCOMES

inability to file and retrieve papers

HOW IT WORKS

It carries an eight inch stack of folders or papers. It has slanted sides so that a folder can remain open by itself at any location in the stack of material. The front of the tray is open in order to give easy access to a mouthstick user.

(Information based on Extensions for Independence literature.)

FIELD TESTED

yes

personal use for three years; currently used by 10 other quadriplegics

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

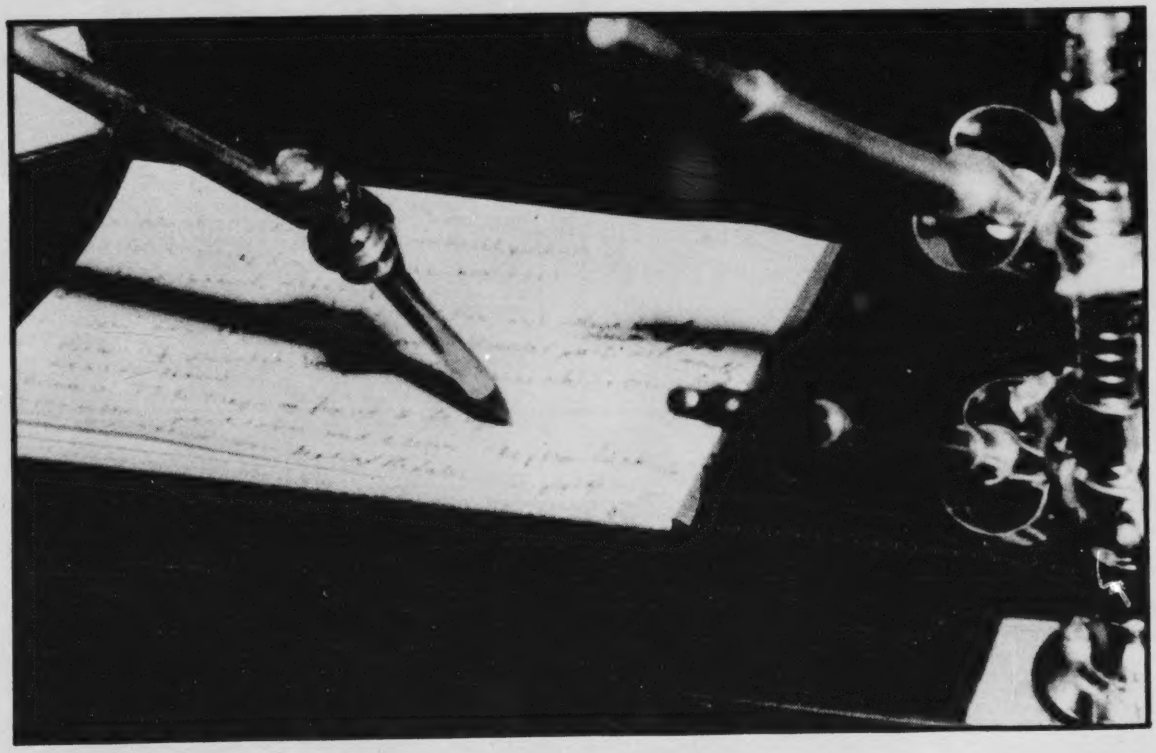
yes

FOR SALE

Extensions for Independence
P.O. Box 3754
Downey, CA 90242

$39.00

HEYER-ABADIE "TALKING" MOUTHSTICK



Photographs courtesy of
Arthur Heyer

HEYER-ABADIE "TALKING" MOUTHSTICK

DEVELOPER

Arthur Heyer
Chester Heyer
Henry Abadie
Extensions for Independence
P.O. Box 3754
Downey, CA 90242

CONTACT PERSON

Arthur Heyer
Extensions for Independence
P.O. Box 3754
Downey, CA 90242
(213) 862-2704

WHERE IT IS USED

Manipulate other objects

PROBLEM(S) IT OVERCOMES

difficulty or inability to write, type, use the phone, etc.

FIELD TESTED

yes

fourteen years of personal use

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Extensions for Independence
P.O. Box 3754
Downey, CA 90242

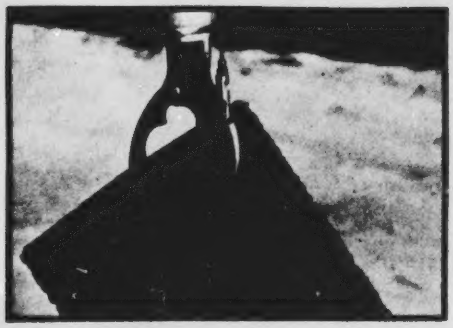
Basic Unit: $60.00
Complete Kit: $240.00
Custom Made by Mail

HOW IT WORKS

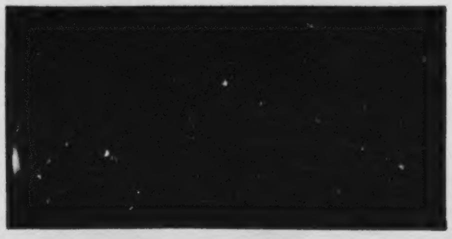
It is called a "talking" mouthstick because it has a "V" shaped and flat mouthpiece which allows the user to both talk and swallow while holding it with the teeth. Different shafts can be attached to the mouthpiece. Basic unit consists of a custom fitted mouthpiece and a lightweight aluminum tube with a rubber tip. The tube can be adjusted within a range of 2" by an attendant. A more sophisticated mouthstick shaft is also available. It allows the user to interchange tools independently. The complete kit contains the basic unit, a shaft with an interchangeable tool mechanism, three tools (pen, pencil and hook for pulling objects), three attachments to change the function of the tools, and a locking mechanism to enable independent tool changing.

(Information based on Extensions for Independence literature.)

PREHENSILE HAND



Photographs courtesy of
Therapeutic Recreation Systems,
Inc.



PREHENSILE HAND

DEVELOPER

Robert Radocy
1280 - 28th, Suite 4
Boulder, CO 80303
(303) 444-4720

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Agriculture
Construction
Machine Trades
and others

PROBLEM(S) IT OVERCOMES

no upper limb; inability to use tools without adaptors; lack of capacity for vigorous, strenuous upper extremity activity using standard hook

FIELD TESTED

yes

REGULATORY APPROVAL

FDA

WARRANTY PROVIDED

yes

FOR SALE

Therapeutic Recreation Systems, Inc.
1280 - 28th, Suite 4
Boulder, CO 80303

$539.00

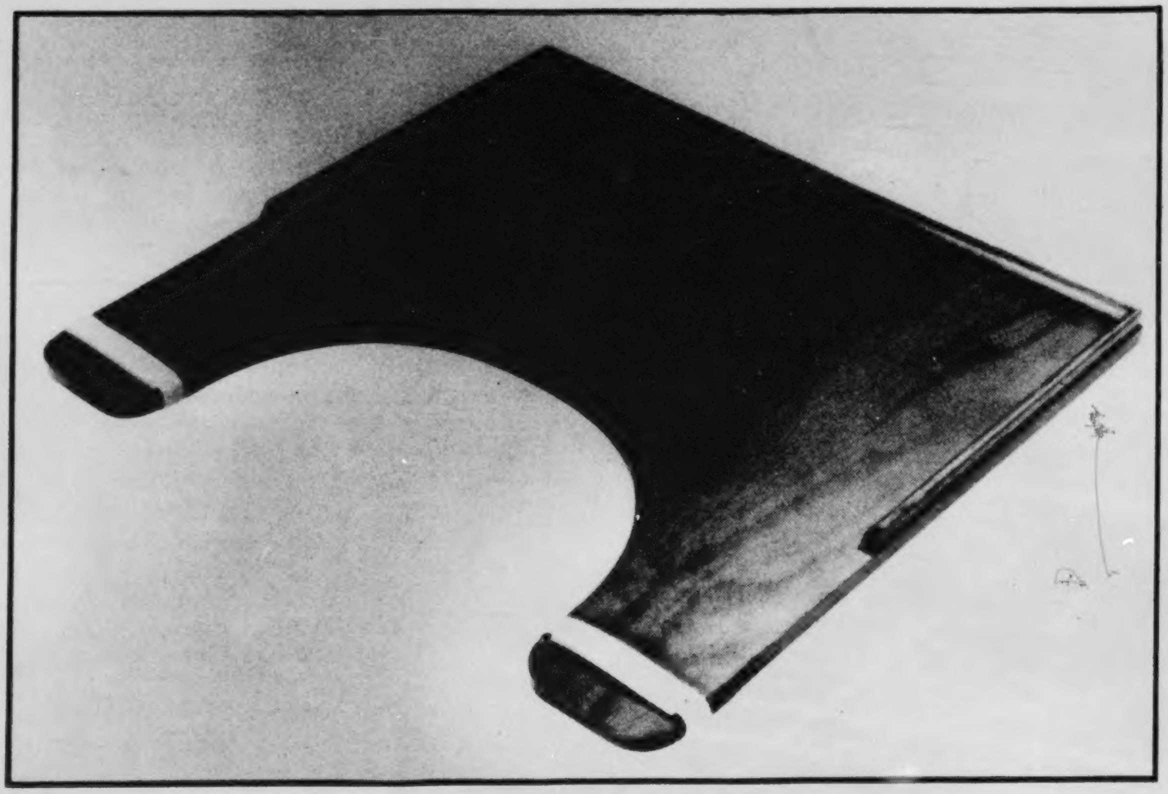
or contact local prosthetist

HOW IT WORKS

Muscle powered, this device is a complete hand replacement (not applicable for persons with a partial hand amputation), which is like the functional action of a human thumb and forefingers. The Hand's thumb operates with a positive voluntary closing action enabling the user to control the amount of force exerted to tighten the cable which activates the thumb. It is suggested that the locking pawls, which are manually engaged, be used for specialized activities only. By consciously gripping objects the user makes use of biofeedback which is lost when locking device is activated. The photographs on the opposite page depict activities accomplished without the locking device.

(Information based on Therapeutic Recreation Systems, Inc. literature.)

WHEELCHAIR TRAY



Photograph courtesy of Bailey Manufacturing Co.

338

WHEELCHAIR TRAY

DEVELOPER

Bailey Manufacturing Co.
118 Lee Street
Lodi, OH 44254
(216) 948-1080

CONTACT PERSON

Adelle
Bailey Manufacturing Co.
118 Lee Street
Lodi, OH 44254
(216) 948-1080

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

work surface for a wheelchair bound person

FIELD TESTED

yes

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Bailey Manufacturing Co.
118 Lee Street
Lodi, OH 44254

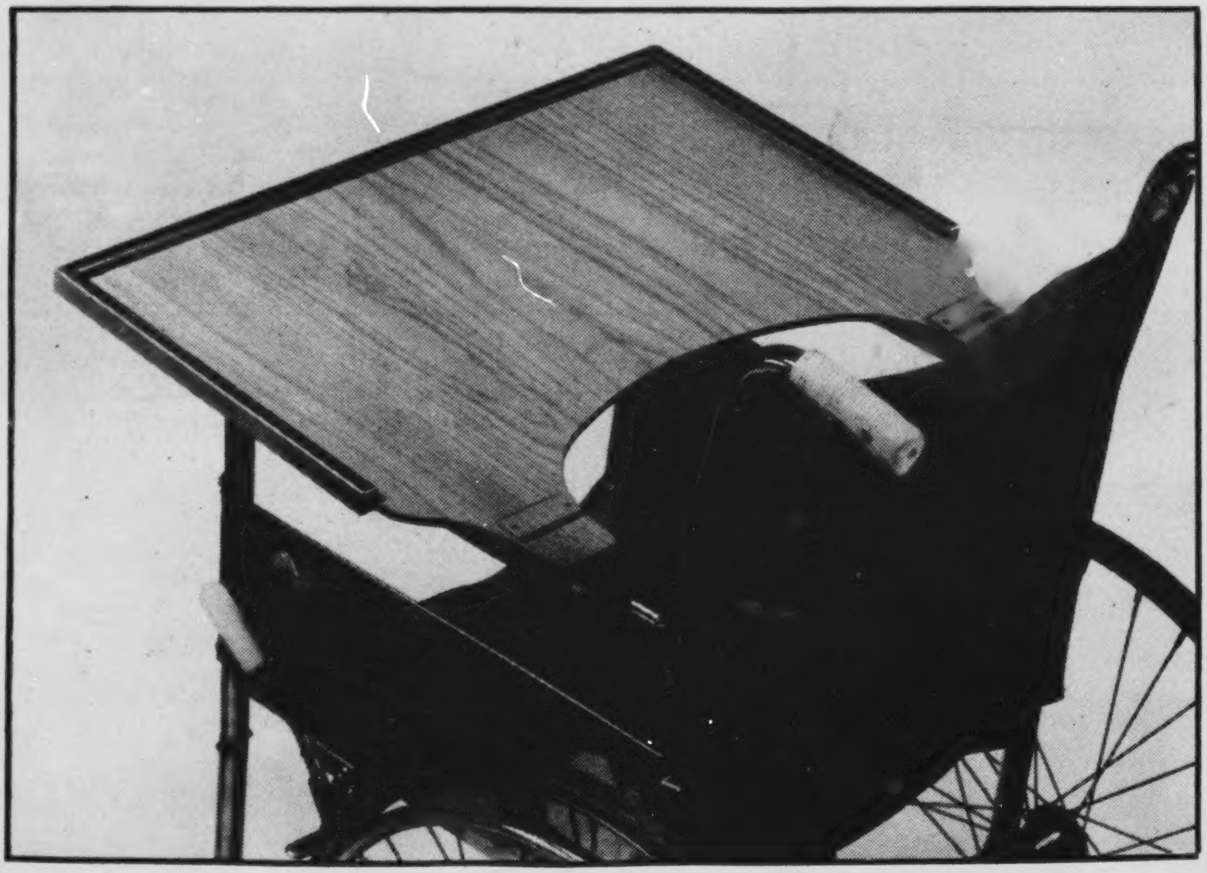
$29.00

HOW IT WORKS

This tray with a 1/2" rim fits all sizes of wheelchairs. It is plastic, 21 1/2" deep, 23 1/2" wide with a 14 1/2" x 8 3/4" cut out. Also available is a tray 18" deep, 21" wide with a 12 1/2" x 7 1/2" cut out.

(Information based on Bailey catalog no. 0583 April 1, 1979.)

WHEELCHAIR TRAY



Photograph courtesy of Hausmann Industries

WHEELCHAIR TRAY

DEVELOPER

Hausmann Industries
130 Union Street
Northvale, NJ 07647
(201) 767-0255

CONTACT PERSON

Rose Rowan
Advertising Manager
Hausmann Industries
130 Union Street
Northvale, NJ 07647
(201) 767-0255

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

work surface for a wheelchair bound person

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Hausmann Industries
130 Union Street
Northvale, NJ 07647

$29.80

HOW IT WORKS

This rimmed tray fits all wheelchairs having full length or desk type arms. The chair can be propelled with the tray in position. It is 18" deep, 24" wide and has a 15½" x 5½" cut out.

(Information based on Hausmann catalog.)

WIDTH VARYING DEVICE FOR WHEELCHAIRS

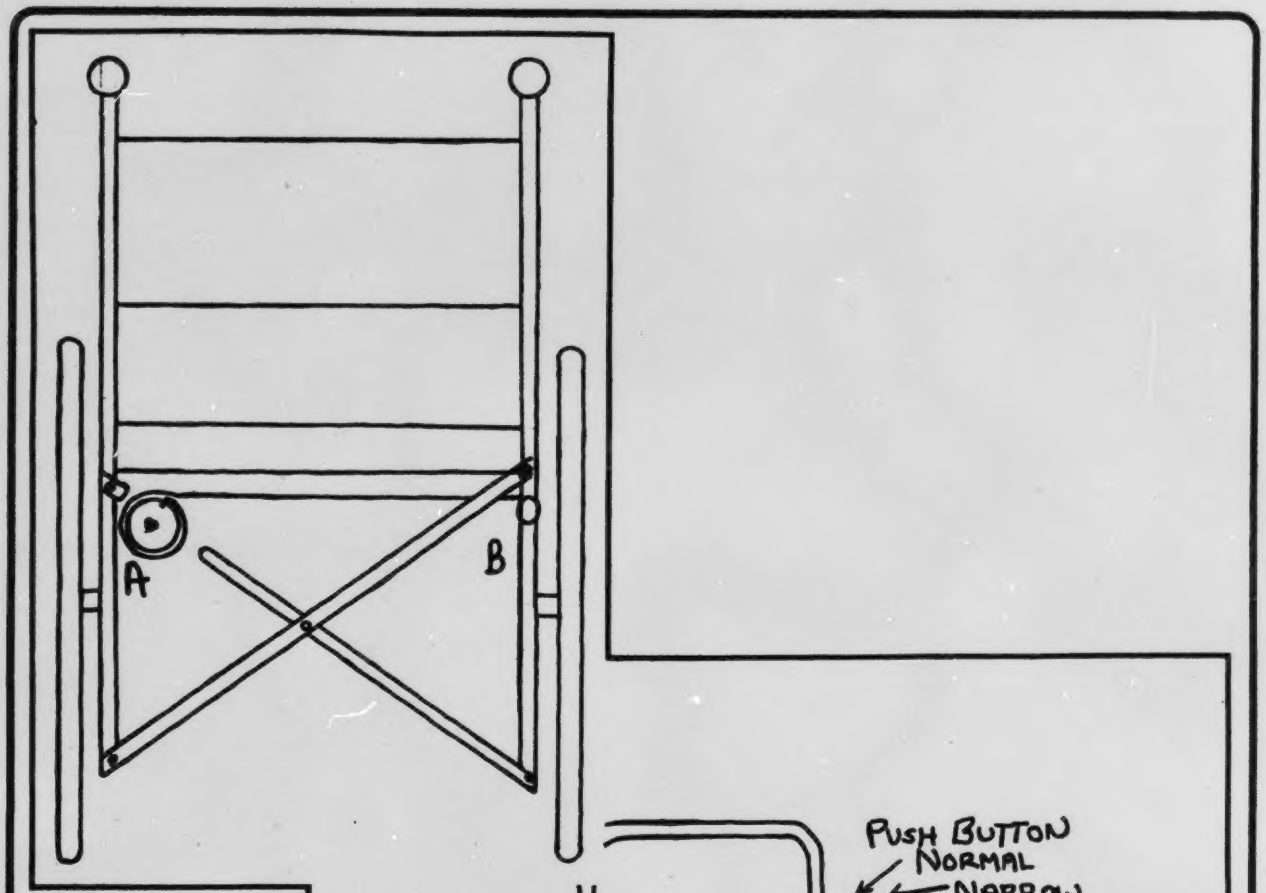

A
B
PUSH BUTTON
NORMAL
NARROW
BATTERIES
MOTOR

Diagram courtesy of F. Volin

WIDTH VARYING DEVICE FOR WHEELCHAIRS

DEVELOPER

F. Volin
3221 Quitman Street
Cola, SC 29204
(803) 787-6248

CONTACT PERSON

Same as Developer

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

getting through 24" door openings

FIELD TESTED

no

REGULATORY APPROVAL

information not provided

WARRANTY PROVIDED

no

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

This device can be mounted onto any size wheelchair without interfering with the collapsing of the chair. It can be installed for left or right hand use and only two fingers are needed to activate the switch.

A geared low speed DC motor is mounted on one side of the chair frame, (A in the diagram). A strap, belt or rope is attached to the opposite side of the chair frame, (B in the diagram), and to the motor pulley. Pressing the narrowing button applies power from the small sealed battery pack to the motor whose pulley will rotate in such a direction as to take up the slack in the strap, thus narrowing the chair. A limit switch will stop the motor at a predetermined chair width. Pressing the normal button reverses the motor direction and restores the strap and chair to its original width. The limit switch will stop the motor.

Other devices which have been developed are a curb hopper and a variable seat position device.

(Information provided by F. Volin.)

HEALTH

Aud-A-Mometer 358

Aud-A-Val 360

Char-Mag Syringe Magnifier 362

Sphygmomanometer with Stethoscope 364

Thermovoice Talking Thermometer 366

AUD-A-MOMETER

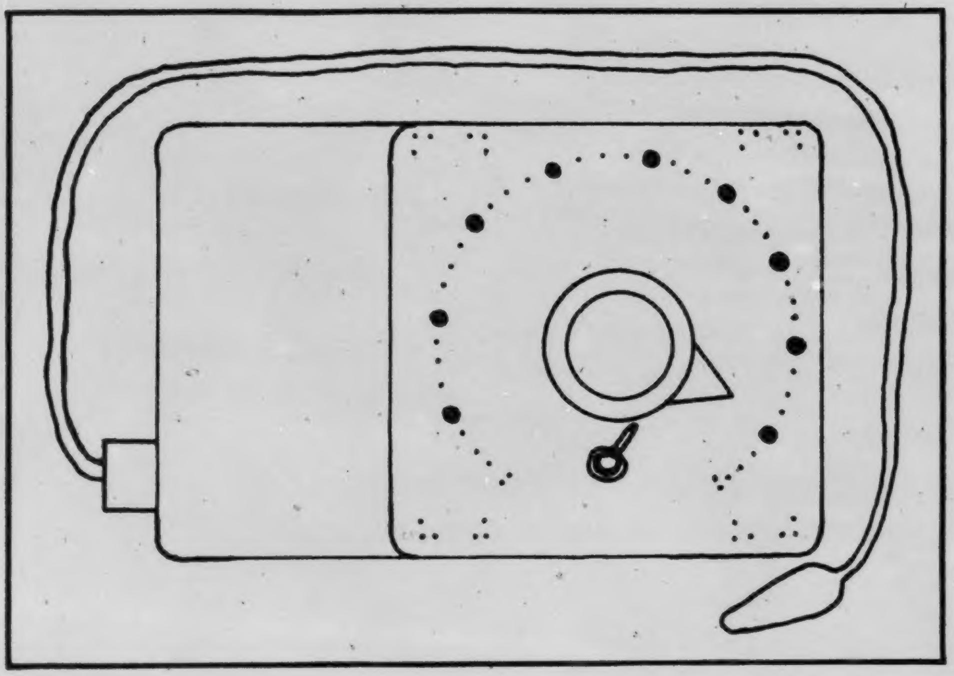


Illustration courtesy of
Science for the Blind
Products, redrawn by
Terri Bleck, WVSC

AUD-A-MOMETER

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

Health
Lab Work
Temperature Measurement

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

Clinical - $100.00
Laboratory - $100.00
Weather - $115.00

HOW IT WORKS

The Aud-A-Mometer has a stainless steel probe on the end of a flexible cable which can be placed wherever the temperature is to be measured. A tone is balanced to zero (no sound) by turning a knob on a small box and taking the reading on a braille scale under the knob. Temperature ranges from 95° - 110° F (or 35° - 43° C) on the clinical thermometer, -10° - +110° C on the lab thermometer, and -30° - 110° F on the weather thermometer. Special ranges can be provided upon request. Accuracy ranges from ±.1° to ±1°.

(Information based on Science for the Blind literature.)

Photograph not available

AUD-A-VAL

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

Health
Wherever an interval needs to be timed

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

$95.00

HOW IT WORKS

The Aud-A-Val is an audible interval timer. It was originally designed to help a doctor count pulses. Within a set time period after pressing the activating button, the unit will emit a short burst of sound. A selector switch allows choice of 15, 30 or 60 second intervals. Other interval selections can be provided on request at additional cost.

(Information based on Science for the Blind literature.)

CHAR-MAG SYRINGE MAGNIFIER

Photograph not available

CHAR-MAG SYRINGE MAGNIFIER

DEVELOPER

CONTACT PERSON

Alex H. Townsend
American Foundation for
the Blind
15 West 16th Street
New York, NY 10011
(212) 620-2169

WHERE IT IS USED

Health

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundation for the Blind
15 West 16th Street
New York, NY 10011

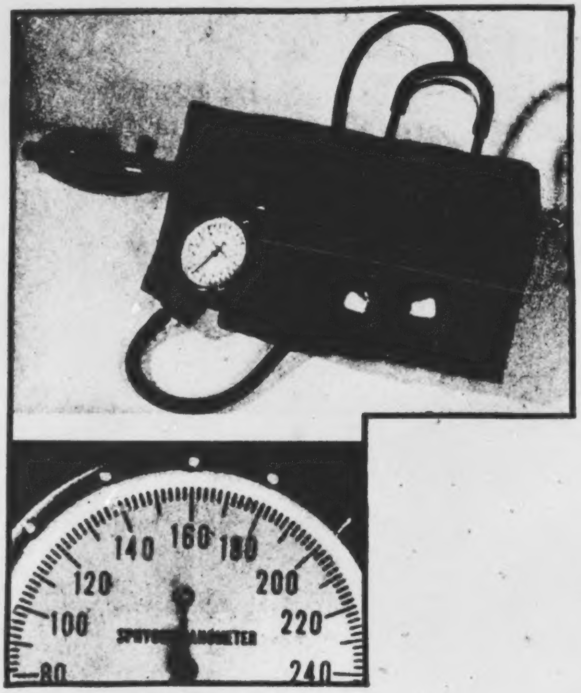
$5.00

HOW IT WORKS

This syringe magnifier allows full view of syringe calibrations. It is easy to snap on and off and is made for B-D and Monoject 100 disposable syringes. It can also be adapted for use with the B-D low dose syringe by placing a rubber band around the Magnifier and the syringe just below the flange. It can be flipped over after the syringe is filled and used as a stand. It is made of durable, optical plastic.

(Information provided by Karen B. Sussman, American Foundation for the Blind.)

SPHYGMOMANOMETER WITH STETHOSCOPE


80
100
120
140
160
180
200
220
240
SPHYGMOMANOMETER

**Photograph courtesy of
American Foundation for
the Blind**

SPHYGMOMANOMETER WITH STETHOSCOPE

DEVELOPER

CONTACT PERSON

Alex H. Townsend
American Foundation for
the Blind
15 West 16th Street
New York, NY 10011
(212) 620-2169

WHERE IT IS USED

Health

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundation for the Blind
15 West 16th Street
New York, NY 10011

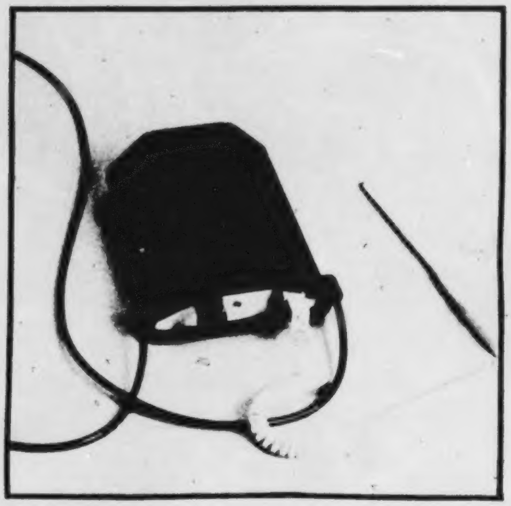
$48.00

HOW IT WORKS

This device is of the aneroid type with 300mm scale. It has a Bowles-type stethoscope attached as well as a velcro self-closing cuff. The glass is removed from the pressure gauge and raised dots are placed around the edge of each 20mm pressure. Notches are filed at each 100mm. The needle is bent up to permit easy reading. A lens cover is provided to protect the instrument when not in use.

(Information based on American Foundation for the Blind literature.)

THERMOVOICE TALKING THERMOMETER



Photograph courtesy of
American Foundation for
the Blind

THERMOVOICE TALKING THERMOMETER

DEVELOPER

American Foundation for
the Blind
15 West 16th Street
New York, NY 10011

CONTACT PERSON

Alex H. Townsend
American Foundation for
the Blind
15 West 16th Street
New York, NY 10011
(212) 620-2169

WHERE IT IS USED

- Health
- Home Economics
- Homemaking
- Lab Work
- Temperature Measurement

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundation for the Blind
15 West 16th Street
New York, NY 10011

$184.50

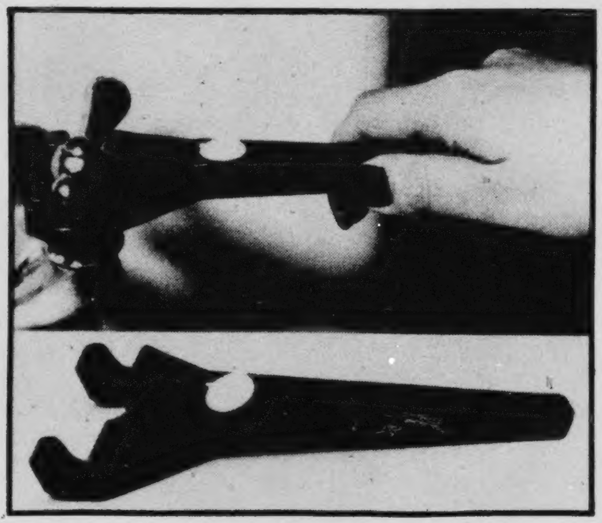
HOW IT WORKS

This talking thermometer features high quality synthesized speech. Using alternative probes, it functions as a clinical thermometer (either oral or rectal), as an indoor or outdoor thermometer and as a cooking thermometer. The clinical probe is plastic with a smooth-edged metal tip and is accurate to within 1/10°. It measures from -25°F to 250°F (-32°C to 204°C). The high heat probe (optional) is used for temperatures from 250°F to 400°F. The on/off switch, volume control earphone plug, and special switch for clinical use are all marked in braille. Size: 5½" x 3 3/8" x 1 3/8".

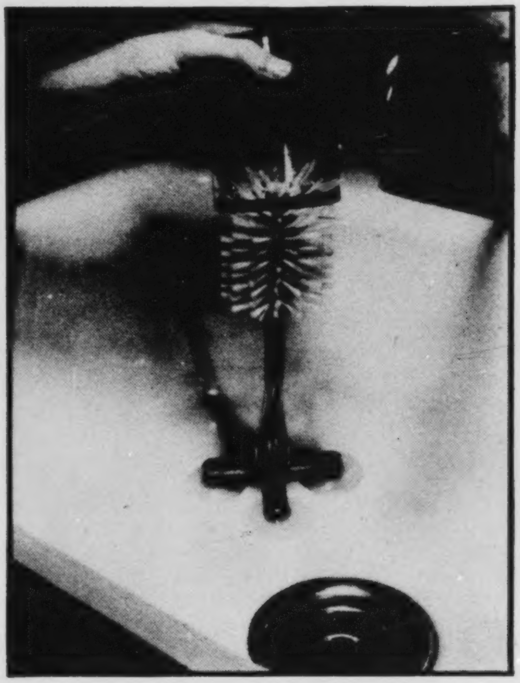
(Information based on American Foundation for the Blind literature.)

KITCHEN WORK

Kitchen Aids 370



Easiturn Faucet Handles



Photographs courtesy of
Maddak, Inc.

The Dish Brush

KITCHEN AIDS

DEVELOPER

Manufactured by:
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

CONTACT PERSON

Fred M. Joslyn
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

WHERE IT IS USED

Kitchen Work

PROBLEM(S) IT OVERCOMES

lack of hand strength or coordination

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc.
Pequannock, NJ 07440

Faucet Handles	$ 7.50 pr.
Dish Brush	$12.00

HOW IT WORKS

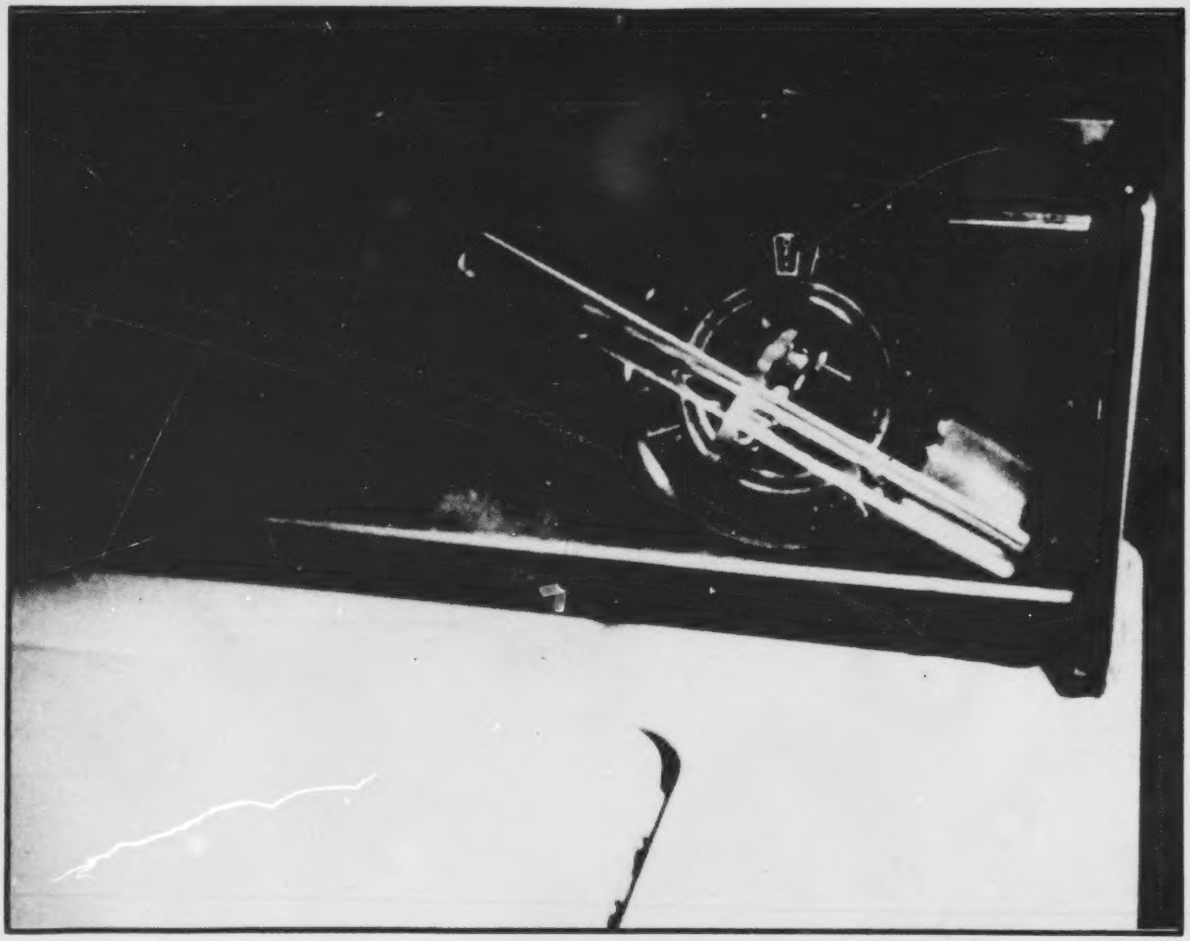
The Easiturn Faucet Handles are rigid plastic handles 7" long which attach to cross type faucet knobs. The handles attach to the faucet knobs without use of tools and make operation easy because of extra leverage using hand or elbow. They are supplied in sets of two, one red, one blue--each has a braille symbol to denote hot or cold. The Dish Brush is a nylon bristle brush with strong plastic handle mounted in a stainless steel holder. The holder has 3 suction cups for mounting on sink or counter top.

(Information based on Maddak Catalog No. 479, 1979.)

LAUNDERING

Washing Machine and Dryer Handle 374

WASHING MACHINE AND DRYER HANDLE



Photograph courtesy of
Adaptive Designs

WASHING MACHINE AND DRYER HANDLE

DEVELOPER

B. Portnoy Levine
Adaptive Designs
126 Knoll Drive
Hamden, CT 06518
(203) 288-2801

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Washing clothes

PROBLEM(S) IT OVERCOMES

lack of fingertip strength to turn or pull out a conventional knob

FIELD TESTED

yes

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

Adaptive Designs
126 Knoll Drive
Hamden, CT 06518

$20.00

HOW IT WORKS

The handle bolts onto protruding section of existing knob. Two holes must be drilled into existing handle to match the handle we provide. The user can grab our handle with both hands and use strength in arms and upper torso to turn the handle around as well as pull it out or push it in. This adaptation will fit any control knob with a perpendicular protrusion which can be drilled and bolted into.

(Information provided by B. Portnoy Levine.)

LISTENING

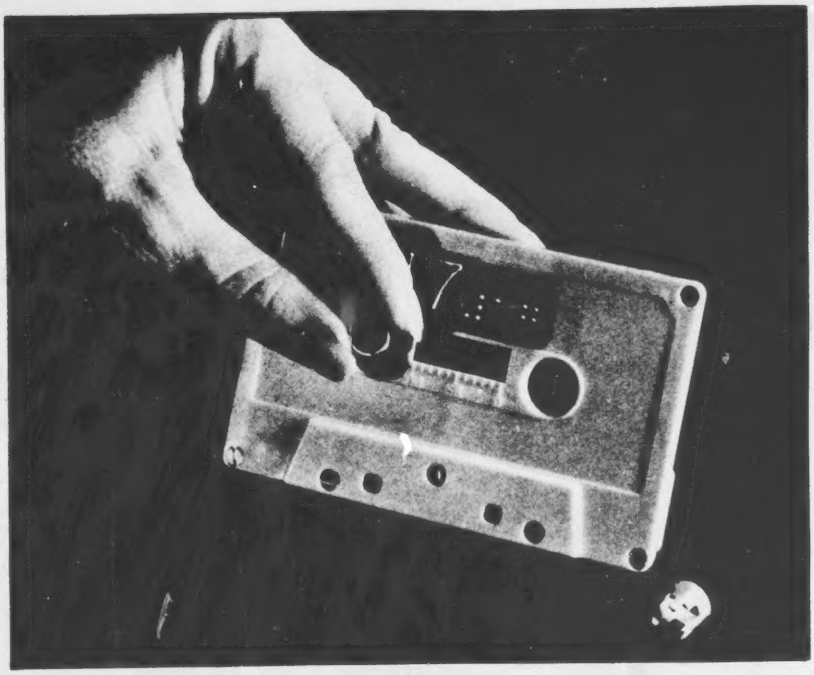
Cassette Indicator 378

Infrared Listening System 380

Personal Sound System 382

Phonic Ear^R Personal FM Systems 384

CASSETTE INDICATOR



Photograph courtesy of
American Printing House
for the Blind

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CASSETTE INDICATOR

DEVELOPER

Manufactured by:
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206
(502) 895-2405

WHERE IT IS USED

Listening
Reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

information not available

FOR SALE

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

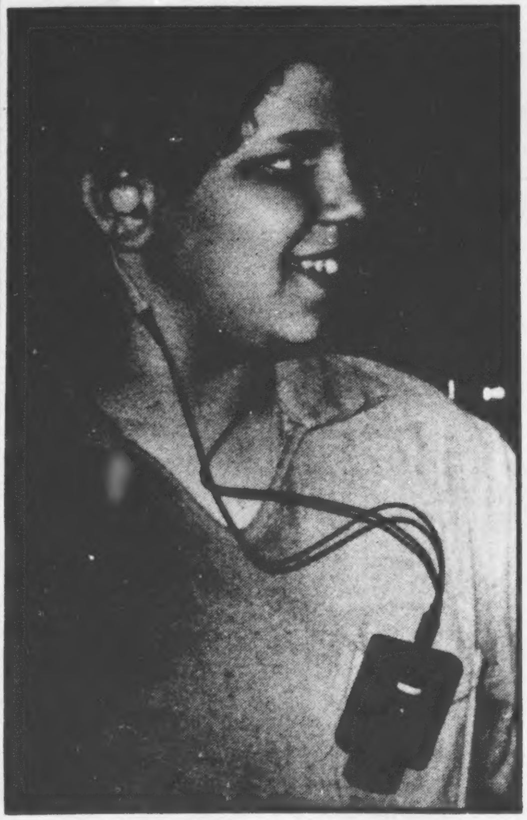
$.30

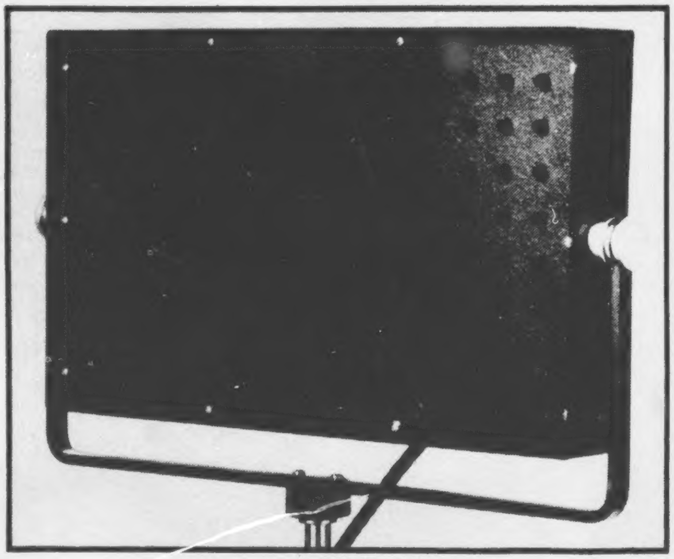
HOW IT WORKS

The Cassette Indicator consists of an aluminum cylinder 3/8" in diameter and approximately ½" long. One end of the cylinder has been cut away so that three equally-spaced prongs remain. These prongs are rounded on the ends and are approximately 1/8" long. The other end of the cylinder has one rounded projection the size and shape of a braille dot. The purpose of this device is to indicate if the tape is moving or has stopped. To obtain this information, the three-pronged end of the indicator is inserted in one of the cassette sprocket holes; then by placing the finger on the braille dot, it may easily be determined whether or not the tape is moving. This device can be used only on open-faced cassette machines.

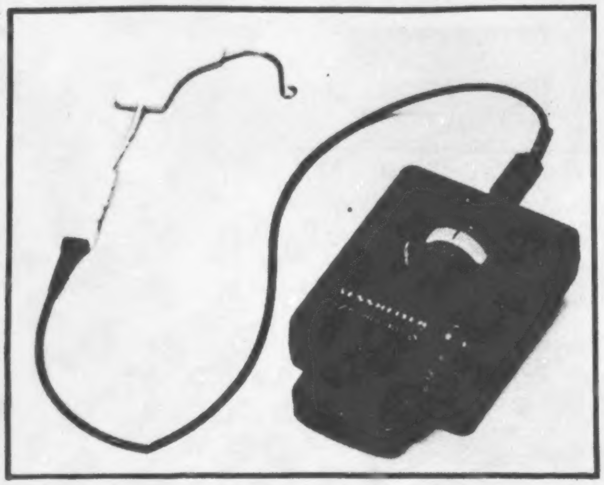
(Information based on American Printing House for the Blind literature.)

INFRARED LISTENING SYSTEM

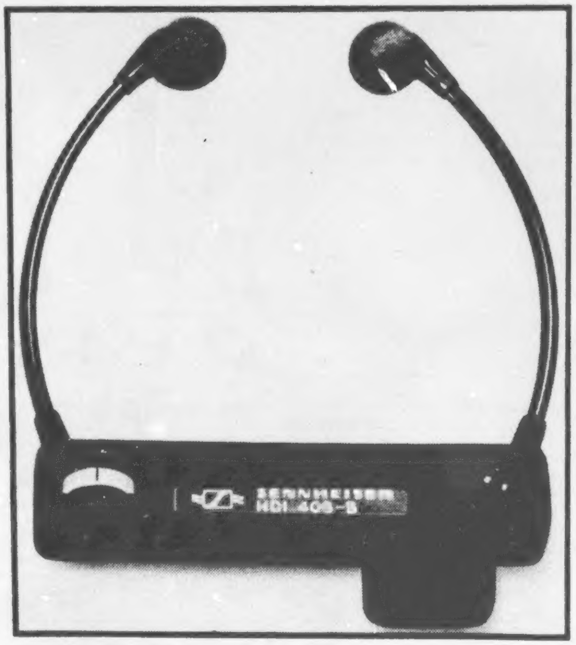




Infrared Light Emitter



Hearing Aid Adapter



Headset

**Photographs courtesy of
Sound Associates, Inc.**

INFRARED LISTENING SYSTEM

DEVELOPER

Sennheiser Electronics
West Germany

CONTACT PERSON

Rose Jaffe
Sound Associates, Inc.
424 W. 45th Street
New York, NY 10036
(212) 757-5679

WHERE IT IS USED

Listening

PROBLEM(S) IT OVERCOMES

hearing impairment; eliminates space between speaker and listener as sound goes directly to the ear

FIELD TESTED

yes

West Germany

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Sound Associates
424 W. 45th Street
New York, NY 10036

HOW IT WORKS

This system consists of an infrared light emitter and individual receivers. The infrared light emitter is mounted on a wall bracket near a stage or podium then plugged into a 110 volt outlet and into an audio line of the existing public address amplifier. The emitter sends infrared light containing audio signals throughout the room. Individual headsets or hearing aids worn by the user receive the audio signal and volume is individually controlled. The electronic parts of Sennheiser's headset are in a plastic housing worn under the chin and supported by two acoustical tubes. It operates on a rechargeable battery. The Sennheiser hearing aid adapter is designed for people needing high amplification. Signals from the light emitter are fed to a small induction loop, (rather than driving an earphone), which hooks behind the user's ear next to the regular hearing aid. This system is only for indoor use.
A component for home use is also available.

(Information based on Sound Associates, Inc. brochure.)

PERSONAL SOUND SYSTEM

Photograph not available

PERSONAL SOUND SYSTEM

DEVELOPER

Dr. B. Leshowitz
Audio Device, Inc.
4702 E. Calle del Medio
Phoenix, AZ 85018
(602) 959-6927

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Listening

PROBLEM(S) IT OVERCOMES

hearing impairment; suppresses background noise found to destroy speech intelligibility received through a conventional hearing aid

FIELD TESTED

yes

sound systems employing infrared light transmission have been marketed by Sennheiser for a number of years

REGULATORY APPROVAL

no

WARRANTY PROVIDED

yes

FOR SALE

Audio Device, Inc.
4702 E. Calle del Medio
Phoenix, AZ 85018

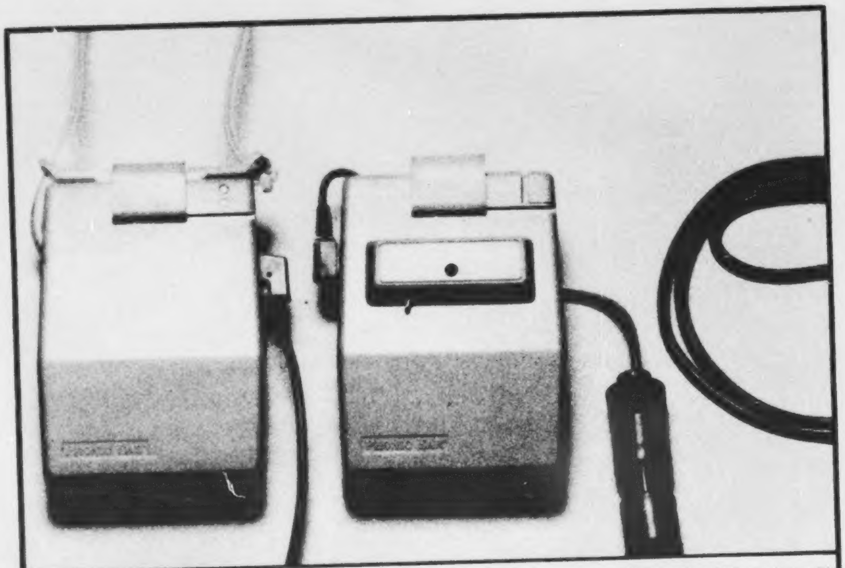
HOW IT WORKS

The Personal Sound System consists of a transmitter and a receiver. The transmitter converts the audio signal of a TV, radio or other source into an infrared light beam. The transmitter operates from an electrical outlet or a rechargeable battery. The portable receiver, worn by the listener, is battery operated. The receiver converts the light signal from the transmitter back into sound which drives an earphone.

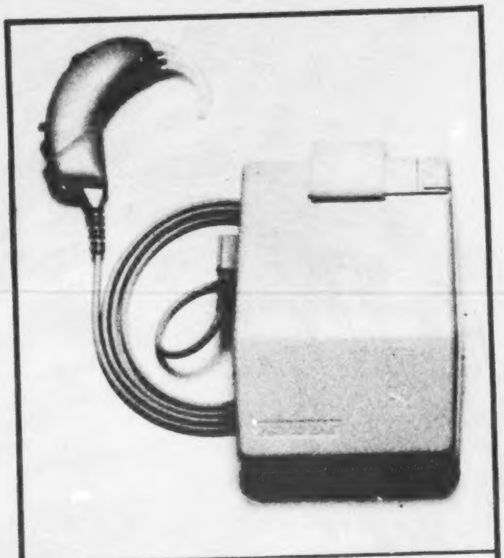
Applications include: personal hearing aids; public address system for people who are hard of hearing; and wireless reproduction of home TV and stero sound.

(Information provided by B. Leshowitz, Audio Device, Inc.)

PHONIC EAR^R PERSONAL FM SYSTEMS


441T teacher microphone/transmitter

445R student FM receiver with AT 163 teleloop for use with induction coil hearing aids


442R student FM receiver with PHONIC EAR® 880 audio input hearing aid

Photographs courtesy of
HC Electronics, Inc.

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PHONIC EAR^R PERSONAL FM SYSTEMS

DEVELOPER

Phonic Ear^R/Phonic Mirror^R
HC Electronics, Inc.
250 Camino Alto
Mill Valley, CA 94941
(415) 383-4000

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communication
Listening

PROBLEM(S) IT OVERCOMES

environments in which competing room noises and or reverberation impedes speech discrimination by hearing aid users

FIELD TESTED

information not available

REGULATORY APPROVAL

Federal Communications Commission

WARRANTY PROVIDED

yes

FOR SALE

Phonic Ear^R/Phonic Mirror^R
HC Electronics, Inc.
250 Camino Alto
Mill Valley, CA 94941

HOW IT WORKS

The Phonic Ear^R Personal FM Systems consist of three main components: two different FM receivers and a microphone/transmitter.

The microphone/transmitter is a miniature wireless FM transmitting station designed to transmit the speaker's voice at a constant sound pressure level to the 442R receiver or the 445R receiver worn by the hearing impaired person. It can be worn lavalier-style or on the belt with a small lapel mike. Transmitting on one of many frequencies, the speaker's voice is only received by wearers having the proper matching RO (receiver oscillator) plugged into their receivers, eliminating spillover from other transmitters. The 442R receives the transmitted voice of the speaker and provides this signal to the wearer's hearing aid for amplification. The hearing aid connects to the receiver with an audio input cord for audio input hearing aids, or with an AT 163 Teleloop for hearing aids without audio input capabilities.

The 445R receiver functions like the 442R receiver. In addition, it has a built-in environmental microphone for hearing aids that have a telecoil (T) position but not a microphone/telecoil (M/T) position. This allows the wearer to receive the speaker's transmitted voice and monitor their own voice or have conversation with people in close proximity. The environmental mike can be turned off at the wearer's discretion.

(Information based on HC Electronics, Inc. literature.)

MACHINE TRADES

Audible Signal Device, Lathe Work Alignment 388

Drilling Jig for Improved Accuracy . . 390

Grinder Modification I 392

Grinder Modification II 394

Hold Down and Push Stick for Upper Extremities Prosthetic Design 396

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Measuring Device for Woodworking: Dadoing 402

Measuring Device for Woodworking: Shelf and Paneling Measurement . . . 404

Measuring Devices for Woodworking: Table Saw Guide 406

Micro Computer Drill Press Multi-Axis Interface for Cerebral Palsy and Quad Persons 408

Optical Projection Equipment 410

Protractor, Lathe Set-Up 412

Radial Arm Assistive Device for Hand Held Tools 414

Saw, Automated Radial Arm 416

Slide Hammer 418

Spindle Drilling Fixture 420

Stanley Combination Square 422

Stanley Drill Guide 424

Starrett Micrometers 426

Three Axis Crimper 428

MACHINE TRADES (cont.)

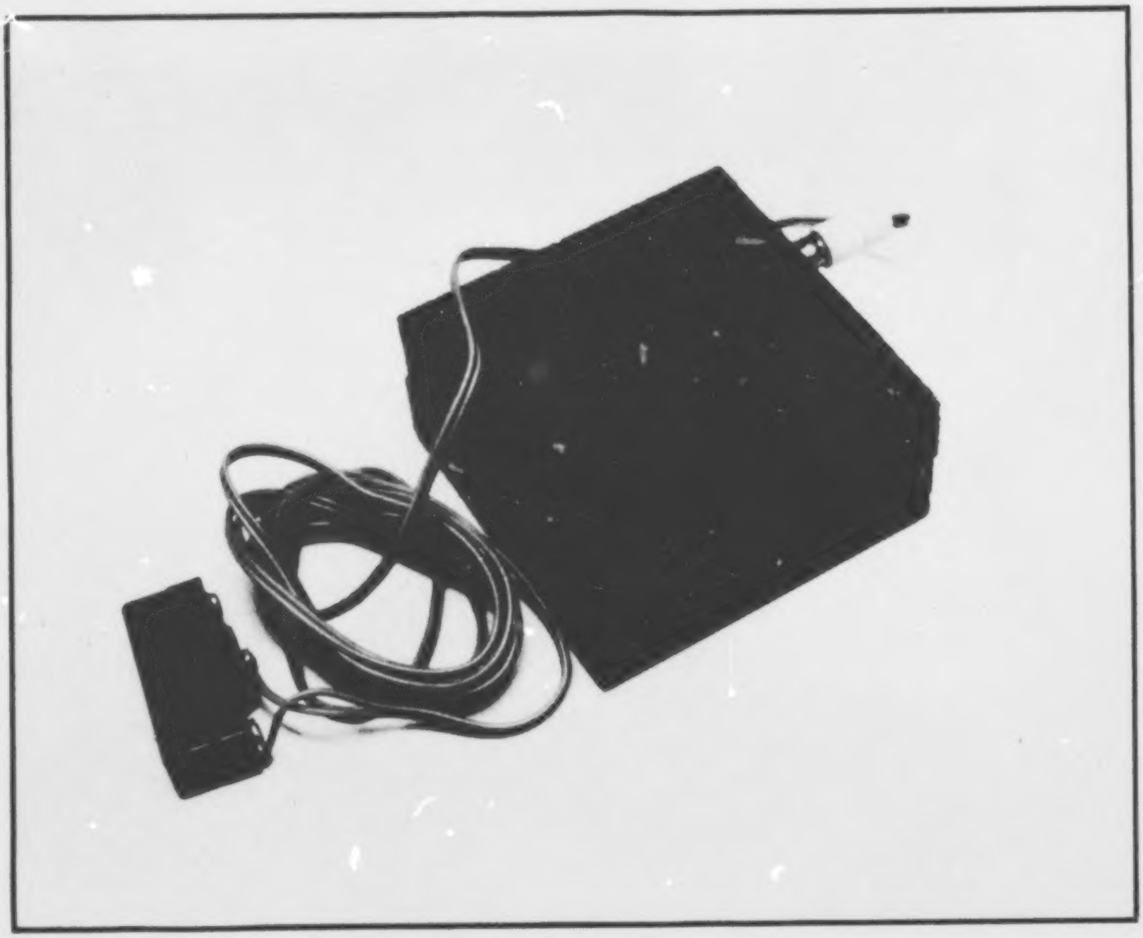
Tool Adjusting Block, Lathe Operation 430

Triangle, Lathe Set-Up 432

Visual Process Inspection Station . . 434

Wire Brush Cleaning of Small Parts . . 436

AUDIBLE SIGNAL DEVICE, LATHE WORK ALIGNMENT



Photograph courtesy of
Jeff Hamm, WVSC

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AUDIBLE SIGNAL DEVICE, LATHE WORK ALIGNMENT

DEVELOPER

Jerome Golner
Golner Precision Products
354 Cottonwood Avenue
Hartland, WI 53029

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Machine Trades: Lathe Operation

PROBLEM(S) IT OVERCOMES

aligning work accurately on a lathe when one cannot see

FIELD TESTED

yes

used in one factory by one blind employee

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

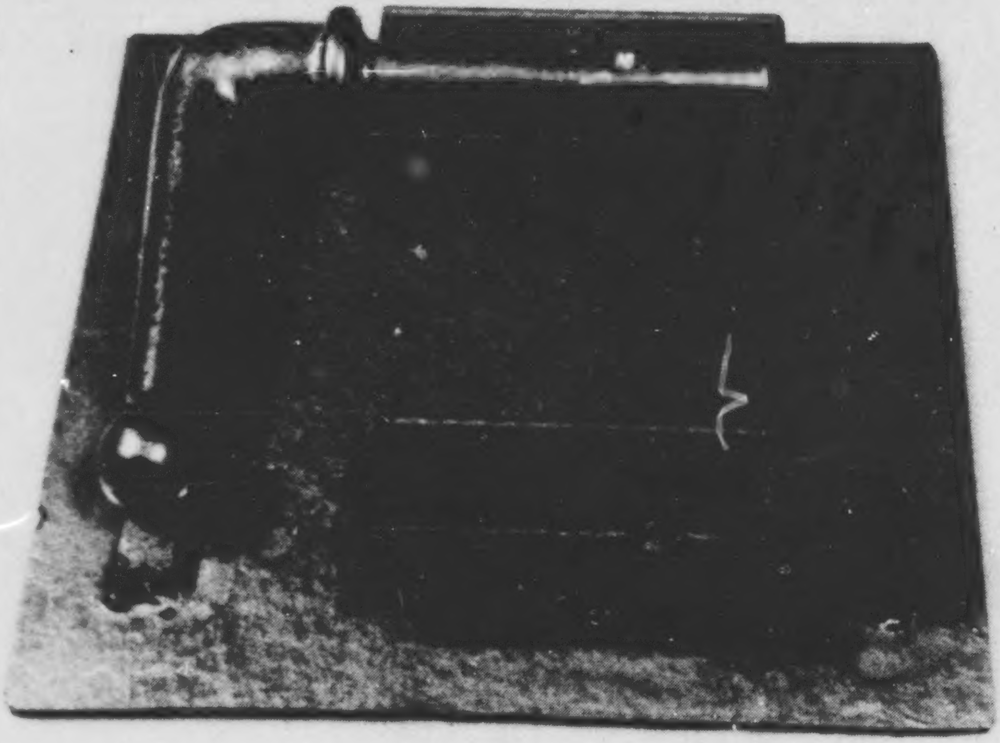
no

HOW IT WORKS

The audible signal device can be used as a warning for carriage travel or to indicate parts in a four-jaw chuck. To use it, adjust the microswitch so that the actuating button contacts the work to be aligned, rotate the work and advance across slide until a signal is heard on one segment of the part. Adjust the jaw until no signal is heard. Repeat the sequence until a signal is heard all around the diameter of the work.

(Information based on personal communication with Jerome Golner.)

DRILLING JIG FOR IMPROVED ACCURACY



Photograph courtesy of California Department of Rehabilitation

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DRILLING JIG FOR IMPROVED ACCURACY

DEVELOPER

Charles Eckles
Independent Contract
Consultant
(213) 360-4180

CONTACT PERSON

California Department of
Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Machining

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

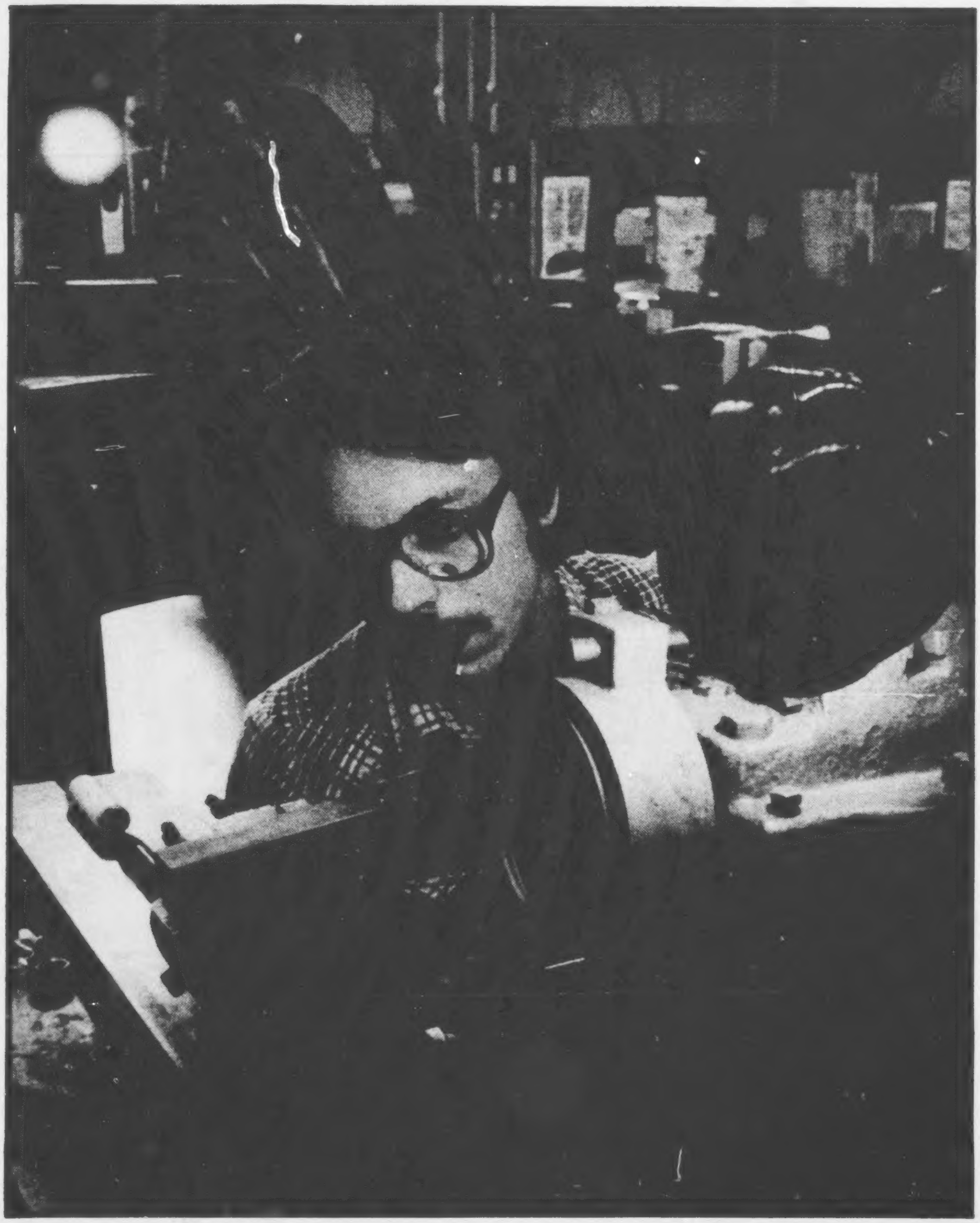
May be made at a minimal cost.

HOW IT WORKS

This jig assists in positioning parts for accurate drilling of holes on a drill press. It is made with a simple angle iron support to keep it level and a fixed stop to assure the hole will be drilled in the same place at the same angle each time.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

GRINDER MODIFICATION I



Photograph courtesy of
A.R. Colby

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GRINDER MODIFICATION I

DEVELOPER

Pratt & Whitney Aircraft
Group
Manufacturing Division
400 Main Street
East Hartford, CT 06108

CONTACT PERSON

A.R. Colby, Manager
EED Program
Pratt & Whitney Aircraft
Group
Manufacturing Division
400 Main Street
East Hartford, CT 06108

WHERE IT IS USED

Manufacturing

PROBLEM(S) IT OVERCOMES

inability of someone who is legally blind to adjust a typical grinder machine quickly and accurately

FIELD TESTED

yes

used by one employee

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

For information about obtaining a closed circuit TV came[illegible]d viewing screen, contact:

Visualtek
1610 26th Street
Santa Monica, CA 90404

HOW IT WORKS

The grinder operator pictured opposite is legally blind (20/200 vision or less when wearing glasses). He can operate 5-6 pieces of milling and grinding machinery. To accommodate him, Pratt & Whitney obtained a few special aids. The grinder operator uses a conventional 50X microscope to check pieces for chips or other flaws. He uses a couple of double magnifying lenses to check the "Last Word" indicator of his grinder. He also uses a closed circuit television camera and viewing screen made by Visualtek to check his work (p. 582). The Visualtek camera can be seen in the upper left corner of the picture and is positioned directly on his work. The viewing screen can be seen just behind his right shoulder.

(Information provided A.R. Colby.)

GRINDER MODIFICATION II

Photographs courtesy of
A.R. Colby

GRINDER MODIFICATION II

DEVELOPER

Pratt & Whitney Aircraft Group
Manufacturing Division
400 Main Street
East Hartford, CT 06108

CONTACT PERSON

A.R. Colby, Manager
EED Program
Pratt & Whitney Aircraft Group
Manufacturing Division
400 Main Street
East Hartford, CT 06108

WHERE IT IS USED

Manufacturing

PROBLEM(S) IT OVERCOMES

inability of someone who is legally blind to adjust a typical grinder machine quickly and accurately

HOW IT WORKS

This set of magnifiers is used by a legally blind employee to check the "Last Word" indicator of his grinder. See Grinder Modification I, (p. 392) for a description of the other job aids used by this employee.

(Information provided by A.R. Colby.)

FIELD TESTED

yes

used by one employee

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

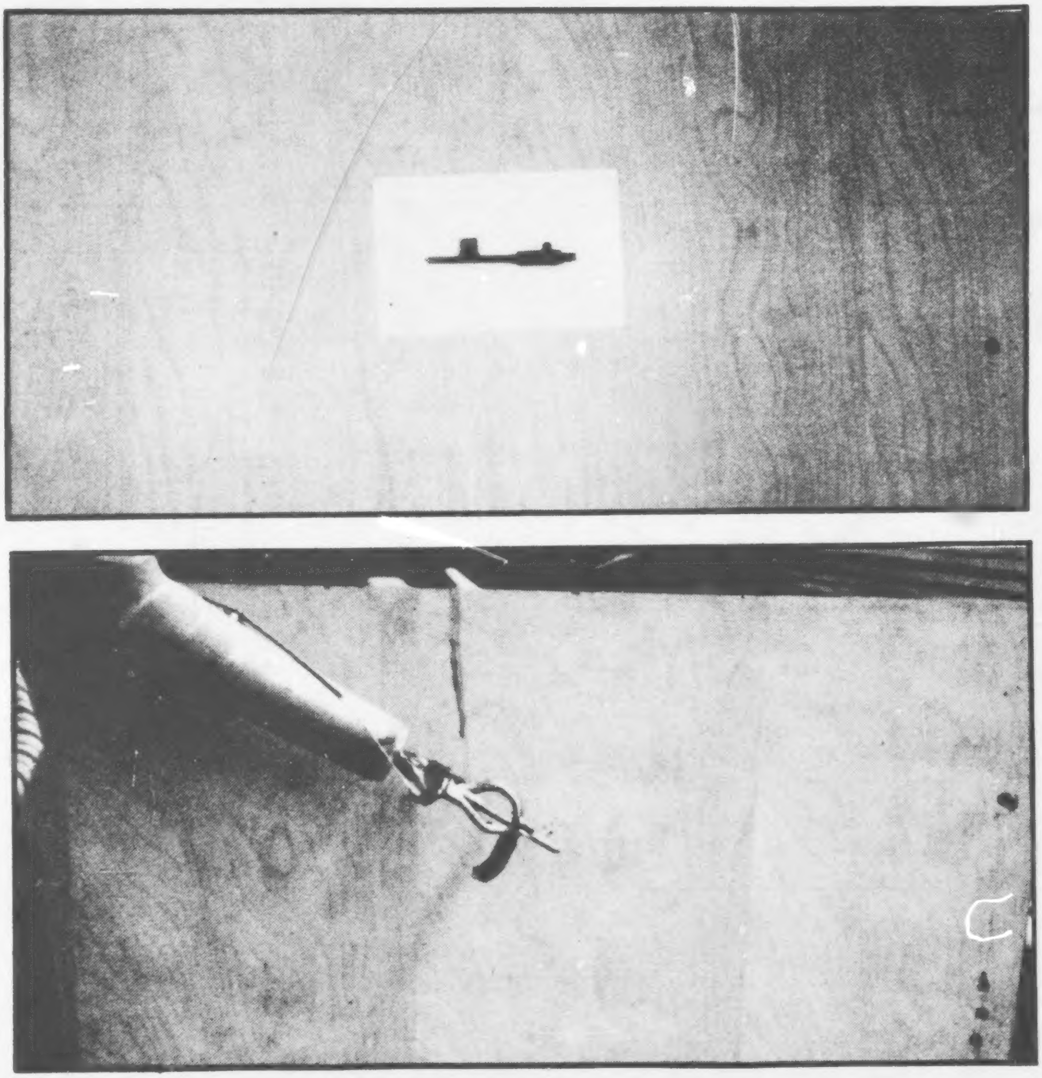
information not available

FOR SALE

information not available

379

HOLD DOWN AND PUSH STICK FOR UPPER EXTREMITIES PROSTHETIC DESIGN



Photograph courtesy of
Philip Wineland

HOLD DOWN AND PUSH STICK FOR UPPER EXTREMITIES PROSTHETIC DESIGN

DEVELOPER

Philip Wineland
Alber Drive
State Technical Institute
Plainwell, MI 49080
(616) 664-4461

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Benchwork
Cabinetmaking
Construction

PROBLEM(S) IT OVERCOMES

potential safety hazard experienced by someone with an arm prosthesis when using a jointer or table saw

HOW IT WORKS

Person is able to hold down a peice of wood and push it over a jointer or through a table saw with more control and less danger of injury.

(Information provided by Philip Wineland.)

FIELD TESTED

yes

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

no

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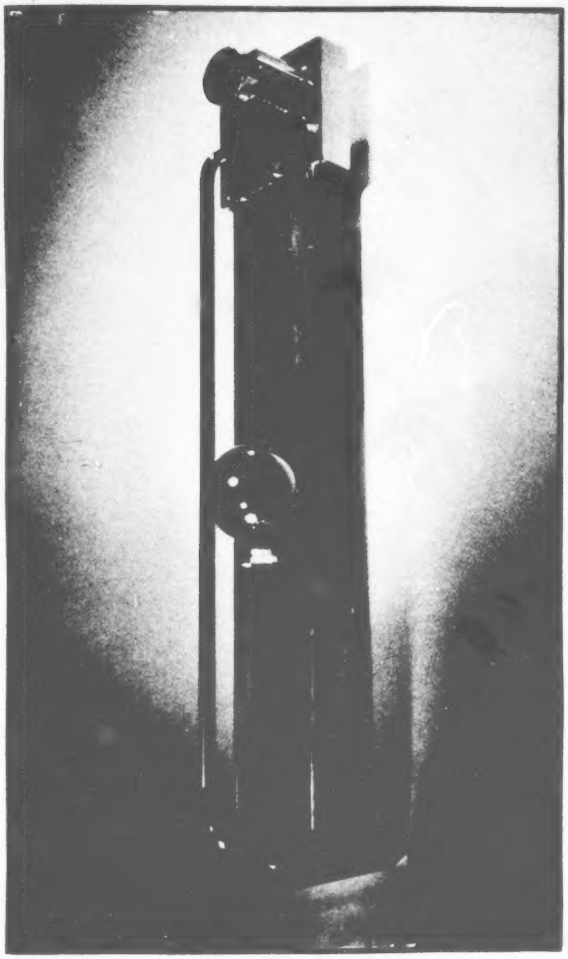
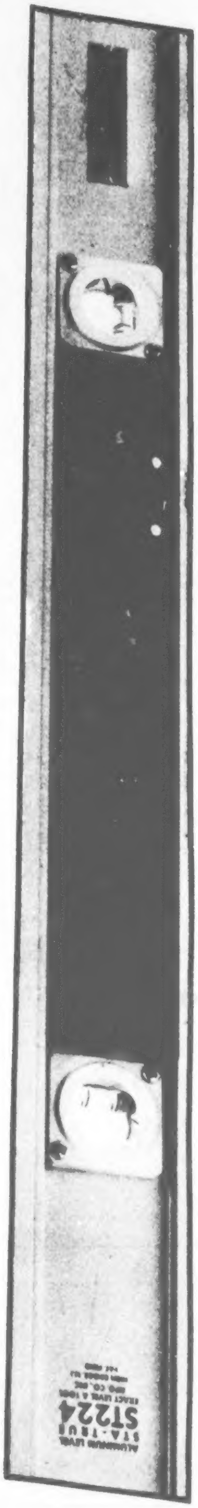
LEVELS



Carpenter's Level


ALUMINUM LEVEL
STA-TRUE
ST224

Electronic Level

Photographs courtesy of
American Foundation for the
Blind

LEVELS

DEVELOPER

CONTACT PERSON

Alex H. Townsend
American Foundation for
the Blind
15 West 16th Street
New York, NY 10011
(212) 620-2169

WHERE IT IS USED

Benchwork
Construction

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundation for the Blind
15 West 16th Street
New York, NY 10011

Carpenter's Level	$35.00
Electronic Level	$96.00

HOW IT WORKS

The Carpenter's Level determines if a horizontal surface is level. A steel ball rolls in a 6¼" V-trough. The screw at one end changes the level ½" per revolution. A retaining rod keeps the ball from falling out. It is nickel plated. The Electronic Level provides accurate horizontal or vertical leveling, comparable to spirit levels used by sighted workers. This aluminum level, 2' long, provides an audible signal for both horizontal and vertical measurements. The audible tone stops when unit is level or vertically aligned.

(Information based on American Foundation for the Blind literature.)

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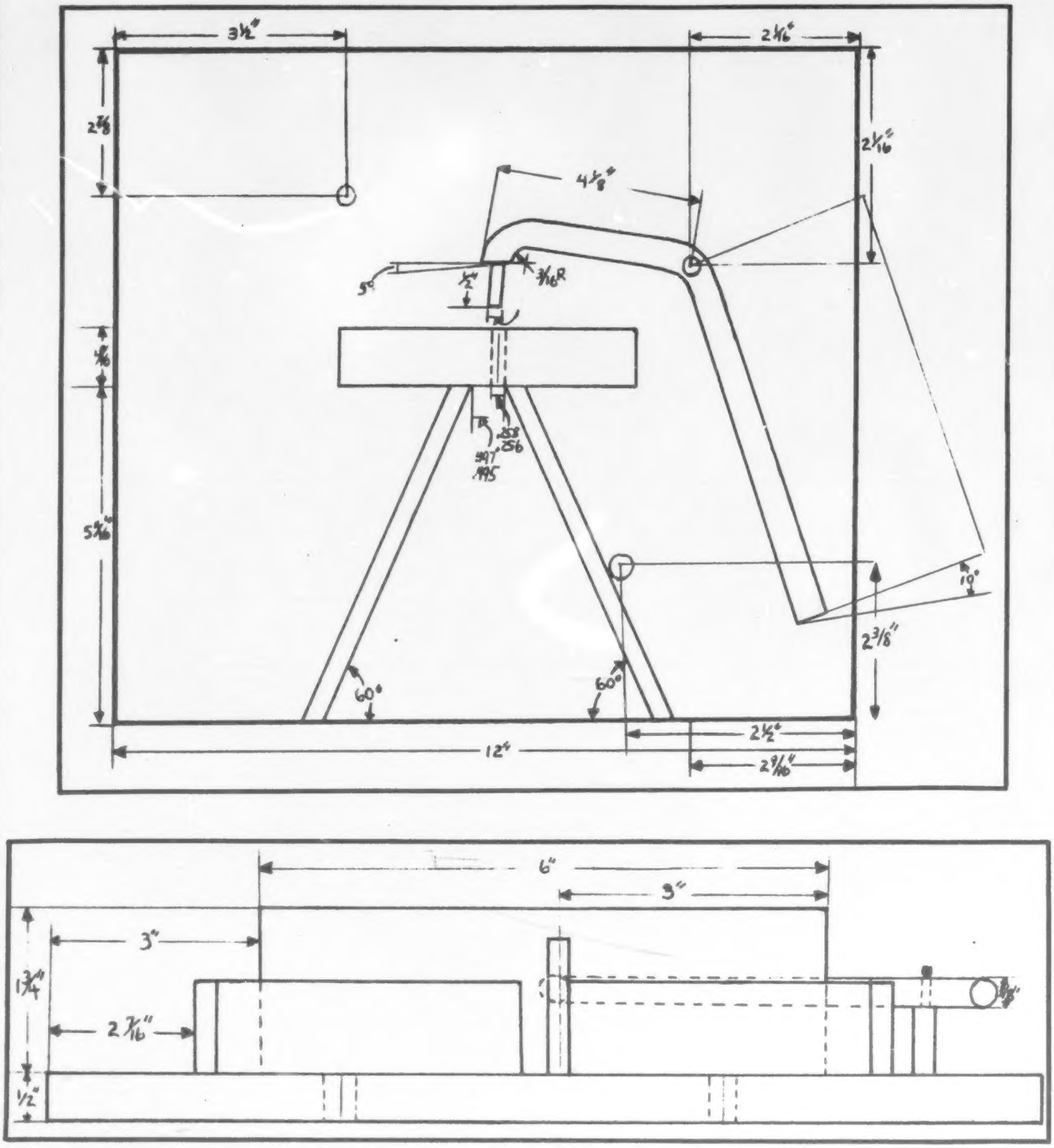
LOCATION JIG


3½"
2 1/16"
2 7/8
2 1/16"
4 1/8"
5°
½"
3/16 R
5/8
.258
.256
.497
.495
5 5/16"
60°
60°
10°
2 3/8"
12"
2½"
2 9/16"
6"
3"
3"
1¾"
2 7/16"
½"
3/8"

(not drawn to scale)

Diagram courtesy of Bob
Warren, redrawn by Terri
Bleck, WVSC

LOCATION JIG

DEVELOPER

Bob Warren J.A.
United Cerebral Palsy of Akron
318 Water Street
Akron, OH 44308
(216) 376-6041

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Machine Trades

PROBLEM(S) IT OVERCOMES

lack of persistent control and grasp strength

FIELD TESTED

yes

United Cerebral Palsy - Akron, OH

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

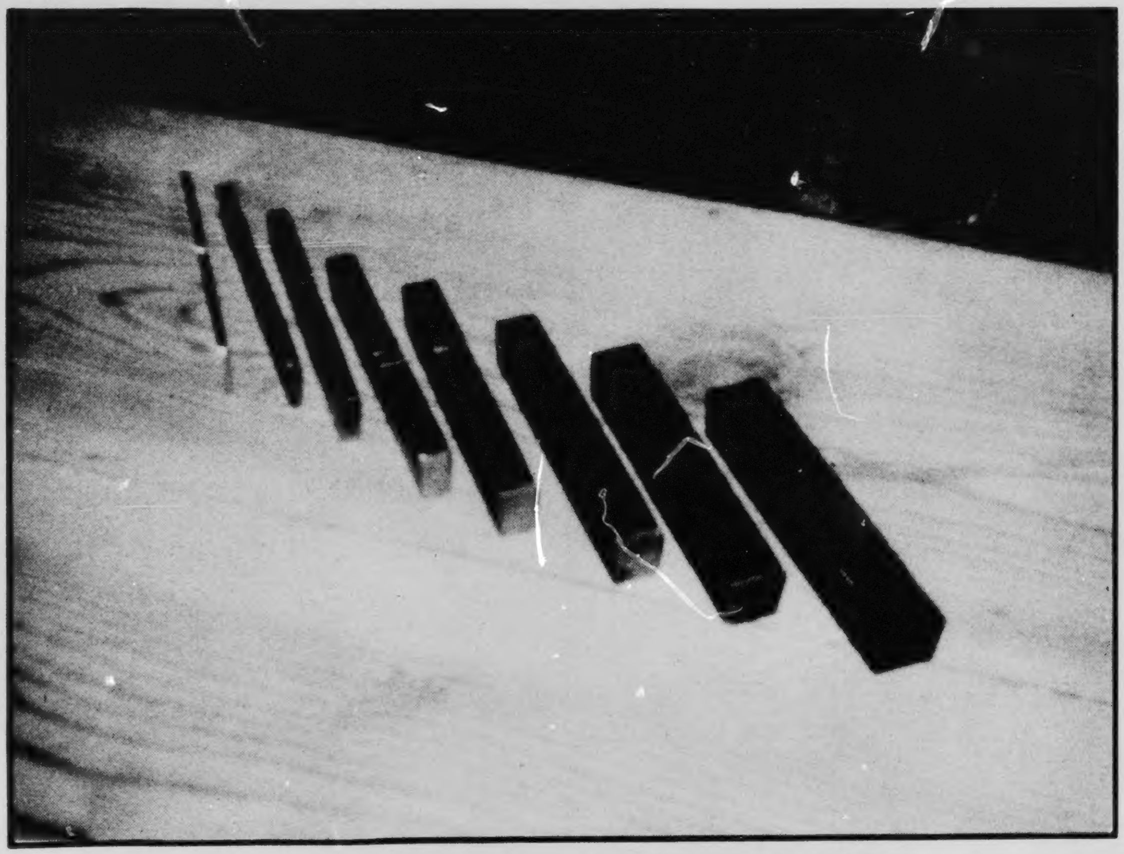
no

HOW IT WORKS

The location jig is designed to attach to the work table of a drill press, utilizing pre-cast slots in the table. The jig with its V-design makes location of the casting easy and positive. The casting can only be located in the correct position due to an offset in the jig which only accommodates the casting in the correct position. The V-design also makes loading easier because it helps keep extraneous movement to a minimum, and alignment positive. A kick-out lever is attached to insure quick, positive removal of the casting after drilling by simply moving the lever to the right.

(Information provided by Bob Warren, UCP.)

MEASURING DEVICE FOR WOODWORKING: DADOING



Photograph courtesy of
Russ Gage

MEASURING DEVICE FOR WOODWORKING: DADOING

DEVELOPER

information not available

CONTACT PERSON

Russ Gage
4820 South 20th Street
Milwaukee, WI 53221
(414) 281-0076

WHERE IT IS USED

Carpentry
Sheet Metal Working
Woodworking

PROBLEM(S) IT OVERCOMES

difficulty experienced by a blind person when making precise cuts in wood or other materials

FIELD TESTED

yes

used by one blind person

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

no

HOW IT WORKS

Each piece in this set is 6" in length. They are used to line up a saw or a router. The thickness is the unit of measurement. The smallest is 1/8" thick; the next is 2/8" or 1/4" in width, and so on up to 1". (Eight pieces of metal are fastened together to make the 1" piece.) The grooves running across each piece allow a blind user to make sure he or she is using the desired size. (Four grooves equals 4/8" or 1/2", etc.) If you must dado a board to a depth of, say, 3/8" you can set the 3/8" unit nut to the table saw blade and raise or lower the blade to the desired height.

(Information provided by Russ Gage.)

MEASURING DEVICE FOR WOODWORKING: SHELF AND PANELING MEASUREMENT

Photograph courtesy of
Russ Gage

MEASURING DEVICE FOR WOODWORKING: SHELF AND PANELING MEASUREMENT

DEVELOPER

William Peters
508 8th Avenue
Sterling, IL 61081

CONTACT PERSON

Russ Gage
4820 South 20th Street
Milwaukee, WI 53221
(414) 281-0076

WHERE IT IS USED

Cabinetmaking
Carpentry
Sheet Metal Working

PROBLEM(S) IT OVERCOMES

difficulty a blind person has when measuring paneling, shelving or drywall

FIELD TESTED

yes

used by one blind person

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

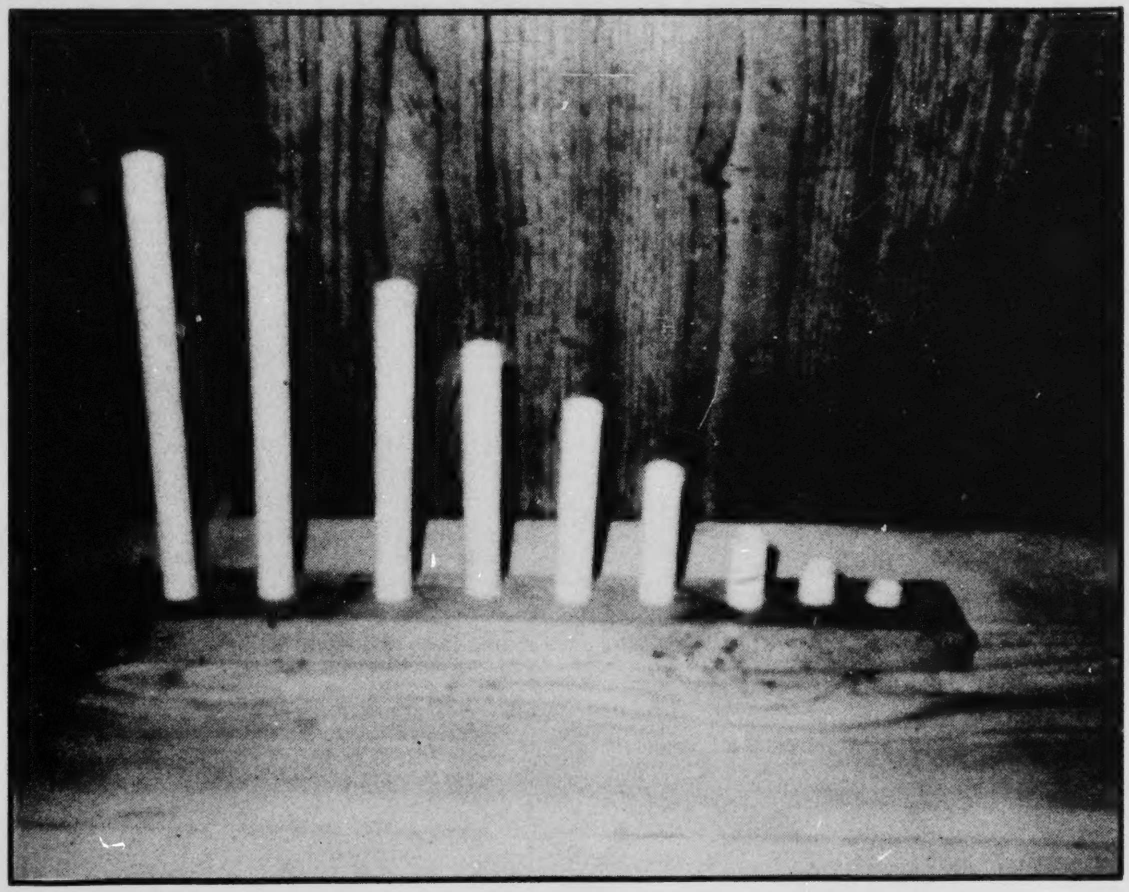
no

HOW IT WORKS

This item is a slide measuring device made from ¼" by 3" paneling. The length of each piece can vary to meet the needs of the user. The longer board has a ¼" groove in the center. The groove is several inches long. The shorter board also has a ¼" groove running nearly its entire length. Two carriage bolts and wing nuts are used to hold the two boards together. By loosening the wing-nuts you can adjust this "slide rule" to measure the width of a shelf for a book-case, or closet, or find the distance between studdings. Tightening the wing-nuts holds the measurement until you can use it to score the board you are going to cut. This is very handy when measuring paneling and drywall for electric switch openings and outlets.

(Information provided by Russ Gage.)

MEASURING DEVICES FOR WOODWORKING: TABLE SAW GUIDE



Photograph courtesy of
Russ Gage

MEASURING DEVICES FOR WOODWORKING: TABLE SAW GUIDE

DEVELOPER

William Peters
508 8th Avenue
Sterling, IL

CONTACT PERSON

Russ Gage
4820 South 20th Street
Milwaukee, WI 53221
(414) 281-0076

WHERE IT IS USED

Cabinetmaking
Carpentry
Sheet Metal Working

PROBLEM(S) IT OVERCOMES

difficulty experienced by blind persons when attempting to cut wood and other materials precisely

FIELD TESTED

yes

used by one blind person

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

no

HOW IT WORKS

This device is made of plastic water pipe. The pipe was cut into different lengths, from ½" to 8" in length. A 3-sided file was used to mark the size of each: 4 inches was four grooves, etc. These pieces are used to measure the length, or especially the width of a board to be cut with a table saw. You put the end of the proper size of pipe against the saw blade, then move the saw's fence up to the other end of the pipe. You then can cut the size needed. If you need a size which is larger than 8", you can tape the proper combination of tubes together with masking tape. (The width of the plastic pipe is 3/8" inside diameter and 1/2" outside diameter.)

(Information provided by Russ Gage.)

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MICRO COMPUTER DRILL PRESS MULTI-AXIS INTERFACE FOR CEREBRAL PALSY AND QUAD PERSONS

Photograph not available

MICRO COMPUTER DRILL PRESS MULTI-AXIS INTERFACE FOR CEREBRAL PALSY & QUAD PERSONS

DEVELOPER

Clinical Convenience Products
Contracting Serv. Div.
2070 Helena Street
Madison, WI 53704
(608) 251-2882

CONTACT PERSON

Don Warren
2070 Helena Street
Madison, WI 53704
(608) 251-2882

WHERE IT IS USED

Machine Trades
Structural Work

PROBLEM(S) IT OVERCOMES

limited control of hand and arm movements

FIELD TESTED

yes

prototype only at Clinical Convenience Products - Madison, WI

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

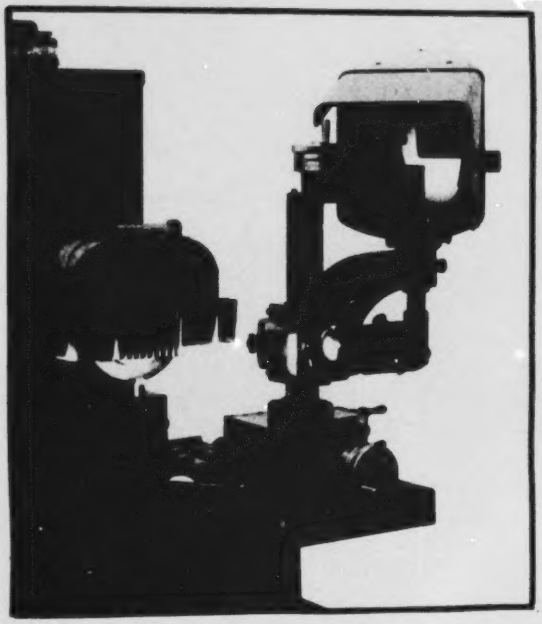
Clinical Convenience Products
Contracting Service Division
2070 Helena Street
Madison, WI 53704

HOW IT WORKS

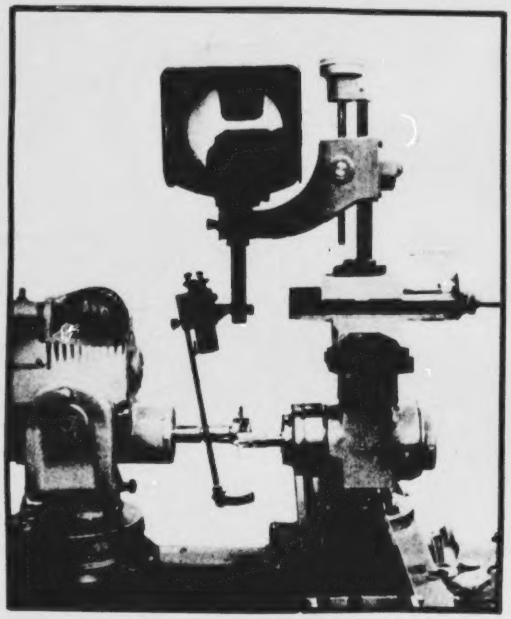
The Autocom developed by the TRACE Center, Madison, Wisconsin (see p. 154), is connected to the drill press controls by means of an electronic switching box. This box also contains a series of small lights, one of which lights each time a drill press function is activated using the Autocom cell programmed to perform that function. That is if the user selects the "on" cell on the Autocom, the drill press turns on, and a little light on the switching mechanism box goes on. Another light comes on if the user choses the Autocom cell which lowers the drill press, raises it, adjusts the press table, and so forth. This visual feedback from the lights allows the user to verify the choice made. It also allows a little more leeway to change the choice if it is incorrect.

(Information provided by Ricardo Cerna, Rehabilitation Engineering Specialist, Wisconsin Division of Vocational Rehabilitation, and Don Warren.)

OPTICAL PROJECTION EQUIPMENT

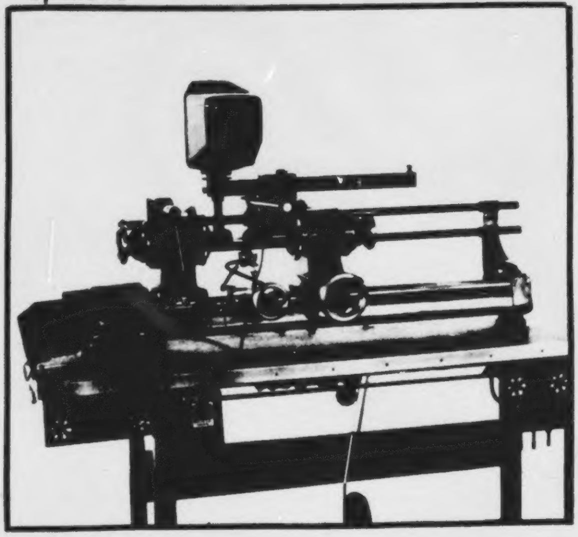


Reversible support arm and horizontal lens system on grinder



Reversible support arm over work spindle

Mounted with tool holder as Presetter



Mounted on glass forming lathe

Photographs courtesy of Stocker & Yale, Inc.

OPTICAL PROJECTION EQUIPMENT

DEVELOPER

Manufactured by:
Stocker & Yale, Inc.
133 Brimbal Avenue
Beverly, MA 01915
(617) 927-3940

CONTACT PERSON

Michael A. Lavey
Stocker & Yale, Inc.
133 Brimbal Avenue
Beverly, MA 01915
(617) 927-3940

WHERE IT IS USED

Benchwork
Machine Trades

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

standard industrial product

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Stocker & Yale, Inc.
133 Brimbal Avenue
Beverly, MA 01915

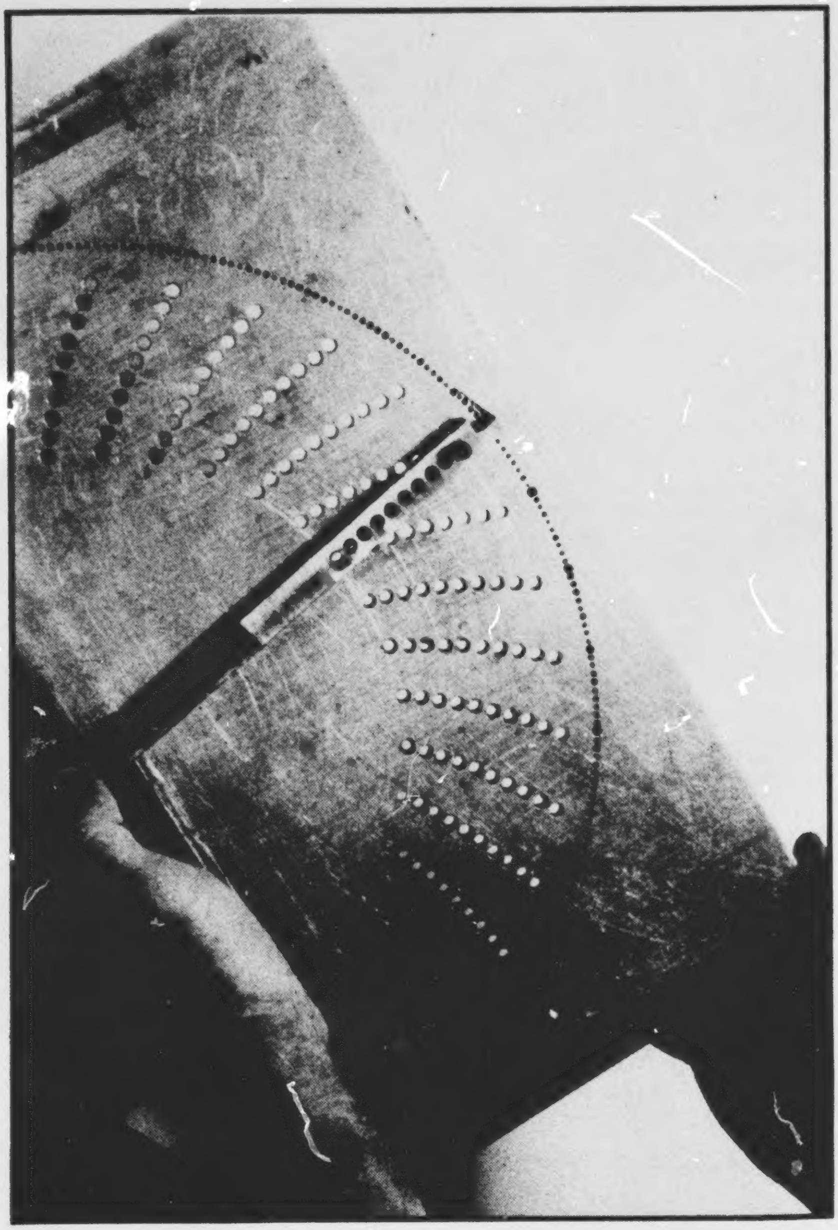
Quotation given on price, depending on model and application. $3,000 - $5,000 range.

HOW IT WORKS

In order to align, inspect, gauge, fit or measure machine parts, a screen, lenses (10x, 20x, 31.25 or 50x), illumination and related accessories project a magnified image on the screen making measurement and inspection easier. The operator can view and work on a part without removing it from the machine. The system can be adapted to various machines, (machine tool cutter, surface grinder, lathe, miller), using a reversible arm support or an extension boom arm. The mounting can be over the work spindle, directly to the work table, over the wheel spindle or on the base of the machine.

(Information based on Stocker & Yale, Inc. literature.)

PROTRACTOR, LATHE SET-UP



Photograph courtesy of
Jeff Hamm, WVSC

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PROTRACTOR, LATHE SET-UP

DEVELOPER

Jerome Golner
Golner Precision Products
354 Cottonwood Avenue
Hartland, WI 53029

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Machine Trades: Lathe Operation

PROBLEM(S) IT OVERCOMES

setting and or measuring specific angles when one cannot see

FIELD TESTED

yes

used in one factory by one blind employee

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

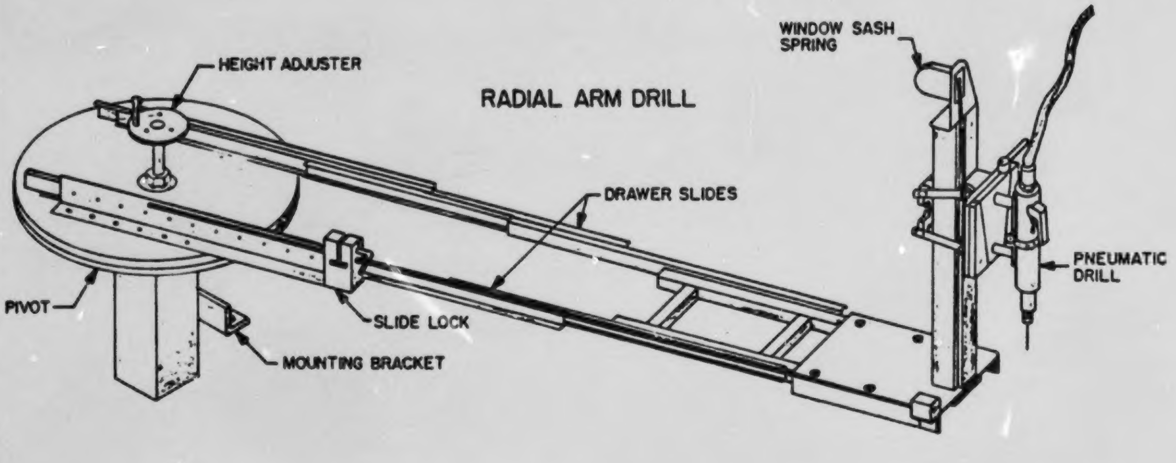
no

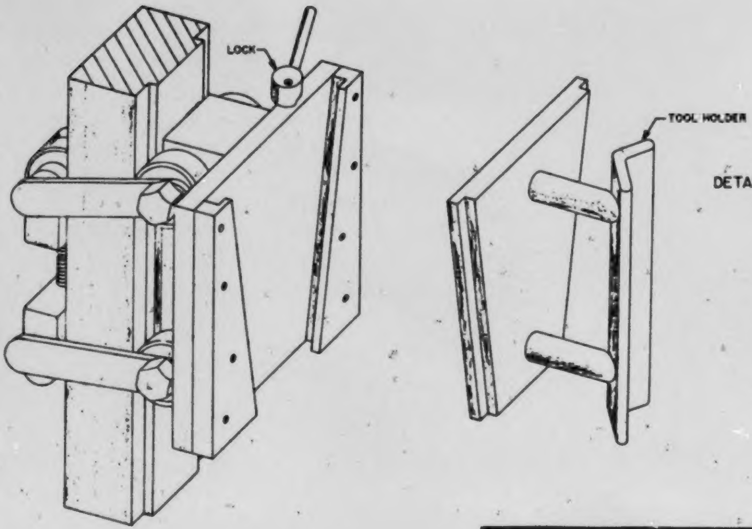
HOW IT WORKS

The holes in the square bar each represent one degree. The hole closest to center is one degree. The next hole out is two degrees, etc. The holes in the plate represent a set of degrees. The first set is from 1-10, the second from 11-20, third from 21-30, etc. To arrive at 45°, the pin is placed in the fifth hole on the bar. It will then engage only holes that represent 5, 15, 25, 35, 45, 55, 65, etc. As the user counts the holes it meets, the first would be 5°, the second 15°, the third 25°, the fourth 35°, and the fifth set 45°.

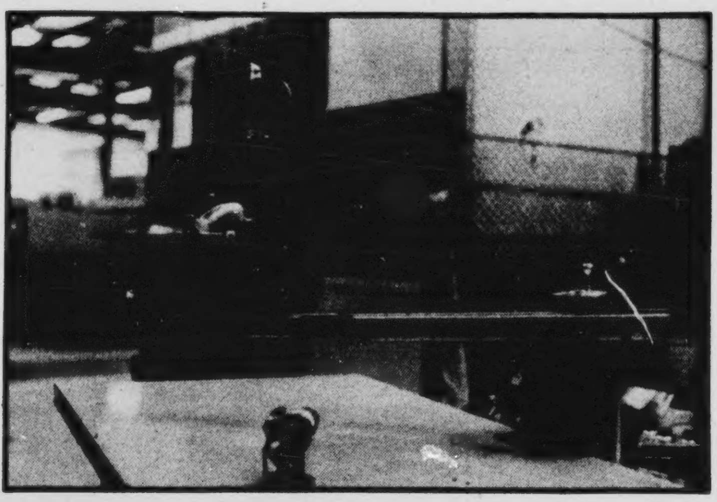
(Information based on personal communication with Jerome Golner.)

RADIAL ARM ASSISTIVE DEVICE FOR HAND HELD TOOLS


RADIAL ARM DRILL
HEIGHT ADJUSTER
WINDOW SASH SPRING
DRAWER SLIDES
PNEUMATIC DRILL
PIVOT
SLIDE LOCK
MOUNTING BRACKET


LOCK
TOOL HOLDER

DETAIL OF REMOVABLE TOOL HOLDER
FOR RADIAL ARM DRILL



Photograph and diagrams courtesy of John H. Leslie, Jr.

RADIAL ARM ASSISTIVE DEVICE FOR HAND HELD TOOLS

DEVELOPER

Rehabilitation Engineering Center
2021 North Old Manor
Wichita, KS 67208
(316) 688-1888

CONTACT PERSON

Leonard Anderson
Rehabilitation Engineering Center
2021 North Old Manor
Wichita, KS 67208
(316) 688-1888

WHERE IT IS USED

Machine Trades

PROBLEM(S) IT OVERCOMES

difficulty locating and holding a drill in a given position to provide a perpendicular hole

FIELD TESTED

yes

Center Industries Corporation - Wichita, KS

REGULATORY APPROVAL

information not provided

WARRANTY PROVIDED

not applicable

FOR SALE

no

HOW IT WORKS

This device was designed and constructed to provide a means of holding a drill or powered hand tool perpendicular to a work surface while still giving the operator complete freedom of movement. It provides rigidity and perpendicularity so that the user can drill accurate holes or utilize a riveter accurately. This tool holder converts a hand drill or hand tool into a radial arm device. The radial arm is not limited to any arch of movement and has in and out travel of approximately 24 inches. The drill fixture is mounted on slide with a vertical movement of approximately 7 inches. This unit is not a true radial arm drill as it only assists the user in positioning and holding the tool. A carriage was constructed to allow instant change of tools. Each tool is mounted on a tool holder and is secured to the holder by a worm gear clamp. The tool holder fits into a receptacle on the carriage.

(Information provided by John H. Leslie, Jr., Rehabilitation Engineering Center)

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SAW, AUTOMATED RADIAL ARM

Photograph not available

SAW, AUTOMATED RADIAL ARM

DEVELOPER

Clinical Convenience Products
Contracting Serv. Div.
2070 Helena Street
Madison, WI 53704
(608) 251-2882

CONTACT PERSON

Don Warren
2070 Helena Street
Madison, WI 53704
(608) 251-2882

WHERE IT IS USED

Safety
Sawing Lumber

PROBLEM(S) IT OVERCOMES

allows individuals to feed stock lumber into a preset (length) saw with accuracy and speed while allowing the individual to operate at a safe distance from the cutting blade

HOW IT WORKS

Radial arm saw was modified using pneumatic cylinder arms and clamps that would position board to be cut by holding a board against the preset stop guide, the table and the saw guide. Once board is in place the radial arm automatically operates, cutting the positioned board. After the saw returns, the clamps release the board and the cut off part is automatically ejected and sets saw for next operation cycle.

(Information provided by Ricardo Cerna, Rehabilitation Engineering Specialist, Wisconsin Division of Vocational Rehabilitation, and Don Warren.)

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

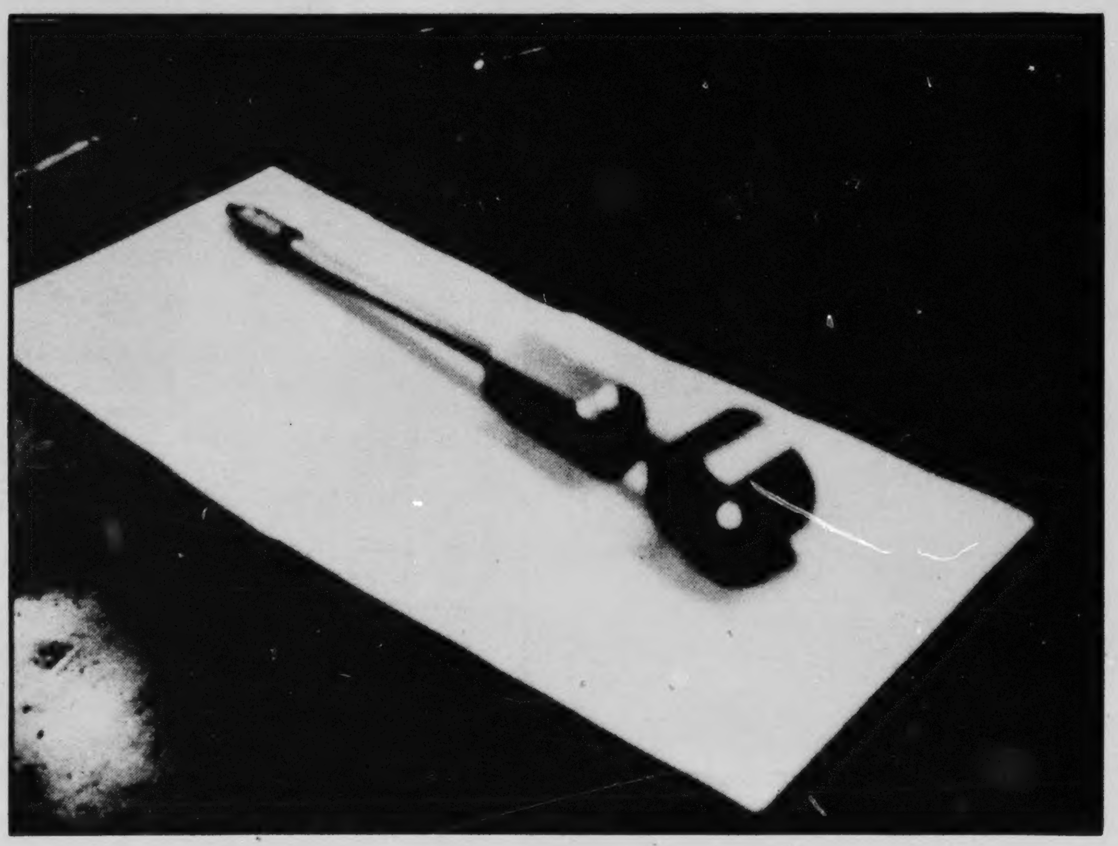
no

FOR SALE

Clinical Convenience Products
2070 Helena Street
Madison, WI 53704

Price dependent upon equipment requirements.

SLIDE HAMMER



Photograph courtesy of
John Gugerty, WVSC

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SLIDE HAMMER

DEVELOPER

Jerome Golner
Golner Precision Products
354 Cottonwood Avenue
Hartland, WI 53029

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Machine Trades: Screw Machine Operation

PROBLEM(S) IT OVERCOMES

possibility of self injury to a blind employee when tightening and loosening inner collect on a hand screw machine or when performing many other pounding tasks

FIELD TESTED

yes

used in one factory by one blind employee who also has no right wrist or hand

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

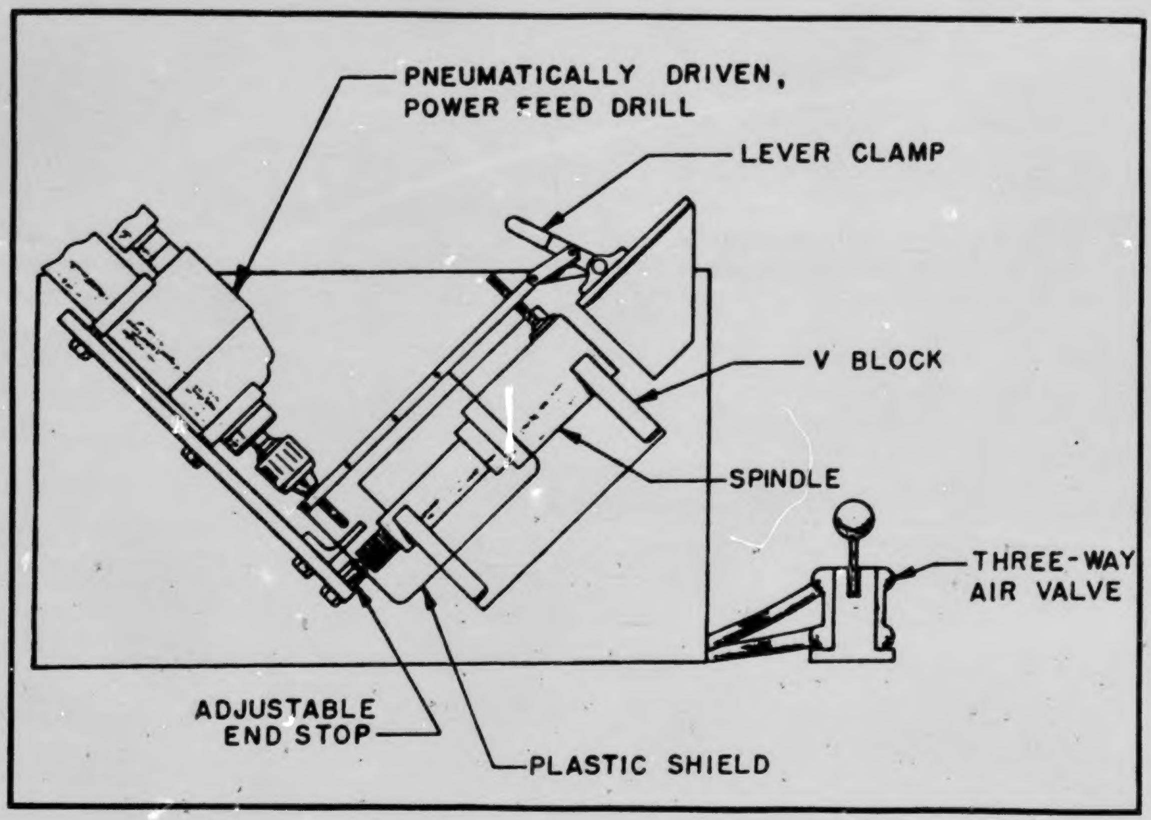
no

HOW IT WORKS

The blind employee places the pointed end of the slide hammer in one of the indentations of the inner collet, puts one hand through the hollow ring, and uses the sliding weight to transmit the force needed to tighten or loosen the collet.

(Information based on personal communication with Jerome Golner.)

SPINDLE DRILLING FIXTURE


PNEUMATICALLY DRIVEN, POWER FEED DRILL
LEVER CLAMP
V BLOCK
SPINDLE
THREE-WAY AIR VALVE
ADJUSTABLE END STOP
PLASTIC SHIELD

Photograph courtesy of John H. Leslie, Jr.

SPINDLE DRILLING FIXTURE

DEVELOPER

Rehabilitation Engineering Center
2021 North Old Manor
Wichita, KS 67208
(316) 688-1888

CONTACT PERSON

Leonard Anderson
Rehabilitation Engineering Center
2021 North Old Manor
Wichita, KS 67208
(316) 688-1888

WHERE IT IS USED

Machine Trades

PROBLEM(S) IT OVERCOMES

fine motor positioning required to position a cylinderical part in correct relationship to the drilling operation

FIELD TESTED

yes

Center Industries Corporation - Wichita, KS

REGULATORY APPROVAL

OSHA

WARRANTY PROVIDED

not applicable

FOR SALE

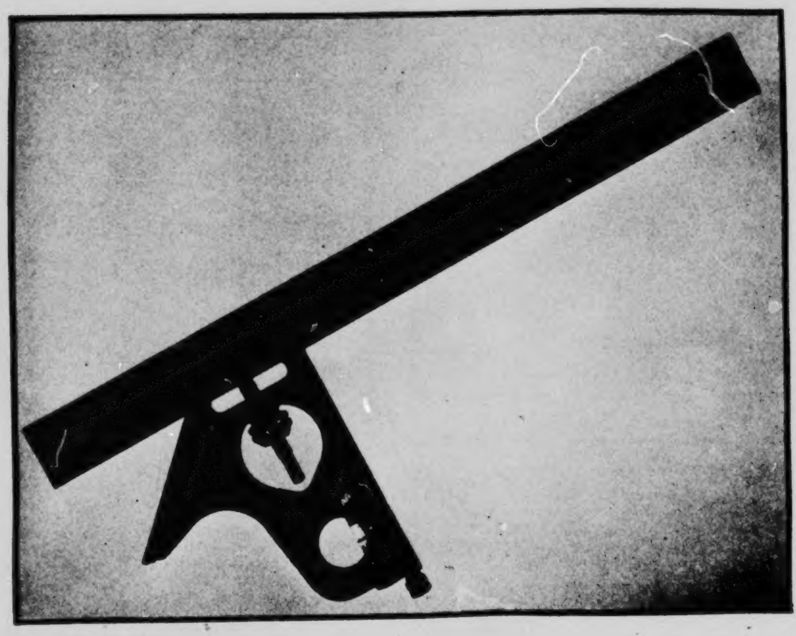
no

HOW IT WORKS

The drill fixture was designed so that a cylinderical part, in this case a spindle, is positioned at a 45° angle to the work surface. The spindle was supported in the fixture by V-blocks and by an adjustable end stop. The 45° angle positioning allows the spindle to slide against the adjustable end stop for the accurate drill position. During the drill operation, a simple lever clamp holds the spindle securely in the V-blocks. To drill the spindle, the spindle is placed in the drill fixture and is automatically located due to gravity which positions it against the end stop. The lever holding the clamp is secured and the drill operation is activated by a three way air valve. The pneumatically powered drill sequences through the drill and retract operations. The lever clamp is released and the spindle is removed from the drill fixture and set aside for inspection. This device could be used to drill any cylinderical part accurately and in a short period of time. One handed capability is all that is necessary to operate the device.

(Information provided by John H. Leslie, Jr., Rehabilitation Engineering Center.)

STANLEY COMBINATION SQUARE



Photograph courtesy of
American Foundation for
the Blind

406

STANLEY COMBINATION SQUARE

DEVELOPER

CONTACT PERSON

Alex H. Townsend
American Foundation for the Blind
15 West 16th Street
New York, NY 10011
(212) 620-2169

WHERE IT IS USED

Benchwork
Construction

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundation for the Blind
15 West 16th Street
New York, NY 10011

$21.00

HOW IT WORKS

This tool combines the equivalent of several tools. It can be used as a straight edge rule (by removing the handle), an outside tri-square, an inside tri-square, a mitre square, a depth gauge and a marking gauge. There is a single raised dot every 1/8", double raised dots at every ½" and three raised dots at every 1" for the entire length of the scale. It includes a level and a scriber, the scriber being kept in the bottom of the handle.

(Information based on American Foundation for the Blind literature.)

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Photograph courtesy of
American Foundation for
the Blind

STANLEY DRILL GUIDE

DEVELOPER

CONTACT PERSON

Alex H. Townsend
American Foundation for the Blind
15 West 16th Street
New York, NY 10011
(212) 620-2169

WHERE IT IS USED

Benchwork
Construction
Machining
Structural Work

PROBLEM(S) IT OVERCOMES

visual impairment

HOW IT WORKS

This device has 13 set positions to permit the user to drill an accurately-centered hole perpendicular to any surface. Ideal for work on metal, wood or plastic. It has a non-slip base for more accurate gripping and the handle has a drill bit storage compartment.

(Information based on American Foundation for the Blind literature.)

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

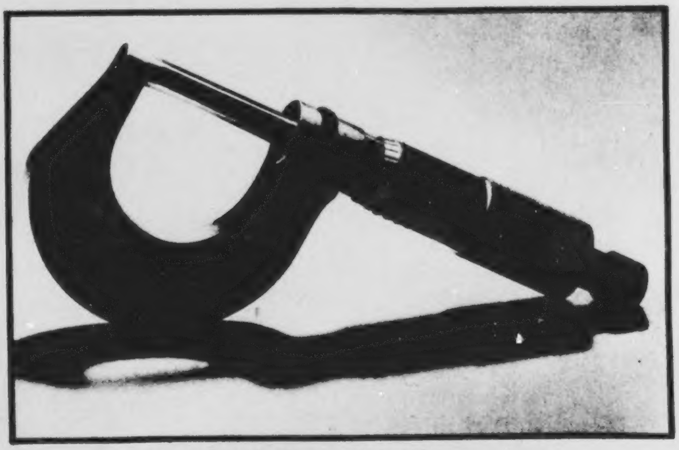
information not available

FOR SALE

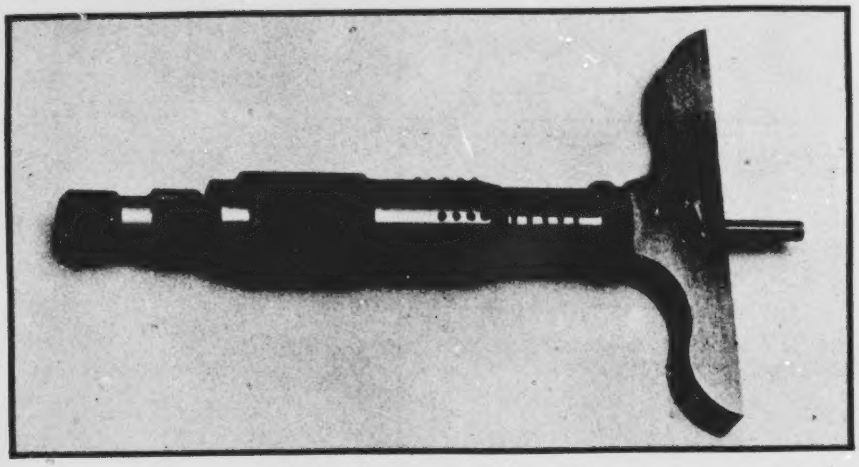
American Foundation for the Blind
15 West 16th Street
New York, NY 10011

$7.50

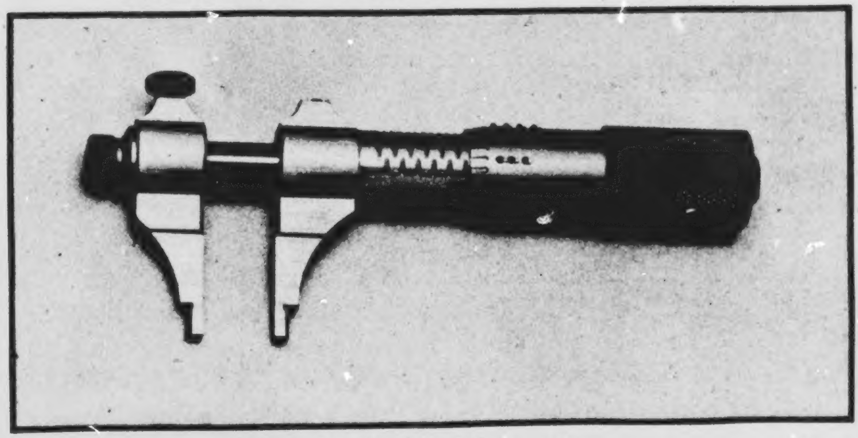
STARRETT MICROMETERS



Standard Starrett Micrometer



Starrett Depth Micrometer



Starrett Inside Micrometer

Photographs courtesy of
American Foundation for the Blind

STARRETT MICROMETERS

DEVELOPER

CONTACT PERSON

Alex H. Townsend
American Foundation for
the Blind
15 West 16th Street
New York, NY 10011
(212) 620-2169

WHERE IT IS USED

Benchwork
Construction
Machining

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundaton for the Blind
15 West 16th Street
New York, NY 10011

$105.00 to $120.00

HOW IT WORKS

The Standard Starrett Micrometer has been adapted for tactual reading. Graduations have been deepened and raised dots have been added. The .100" graduations appear only over the zero line. The .050" markings are carried below the zero line, while the .025" and .075" markings appear above the zero line. Thus an operator can quickly determine in which .025" division the measurement falls and can then determine the final measurement to within a thousandth of an inch. There are no numeral markings.
The Starrett Depth Micrometer features interchangeable rods providing 0" to 3" measurements. It incorporates the same system described above.
The Starrett Inside Micrometer provides precise measurements of interior dimensions and has a barrel similar to that of the Standard and Depth Micrometers.

(Information based on American Foundation for the Blind literature.)

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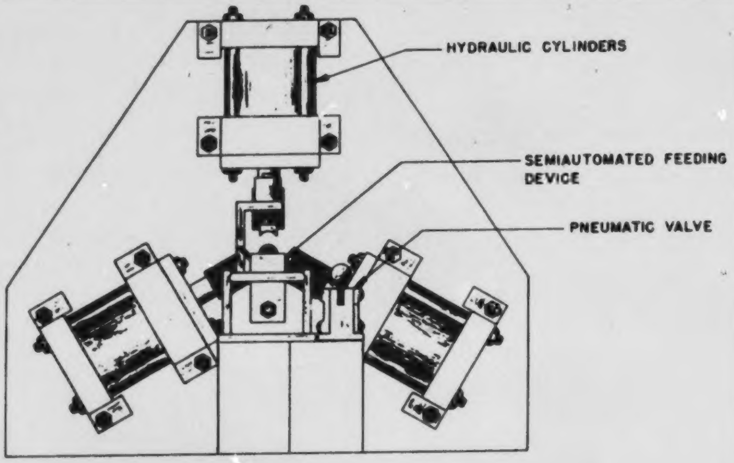
HYDRAULIC CYLINDERS
SEMIAUTOMATED FEEDING DEVICE
PNEUMATIC VALVE

THREE AXIS CRIMPER

Photograph and Diagram courtesy of John H. Leslie, Jr.

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THREE AXIS CRIMPER

DEVELOPER

Rehabilitation F[illegible]ering Center
2021 North Old [illegible]
Wichita, KS 67[illegible]
(316) 688-1888

CONTACT PERSON

Leonard Anderson
Rehabilitation Engineering Center
2021 North Old Manor
Wichita, KS 67208
(316) 688-1888

WHERE IT IS USED

Machine Trades

PROBLEM(S) IT OVERCOMES

fine motor tasks related to materials handling and parts positioning are eliminated

FIELD TESTED

yes

Center Industries Corporation - Wichita, KS

REGULATORY APPROVAL

OSHA

WARRANTY PROVIDED

not applicable

FOR SALE

no

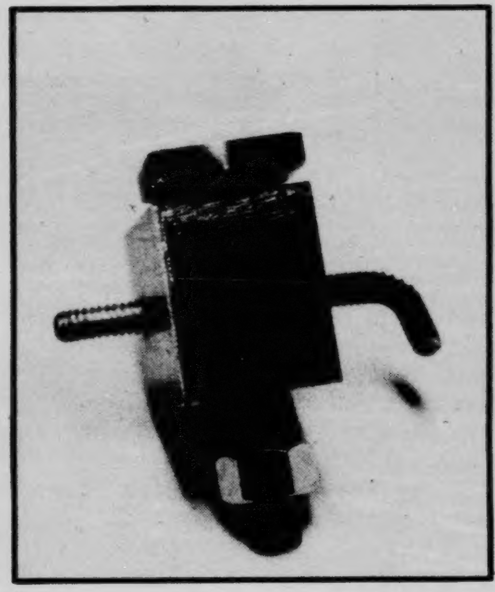
HOW IT WORKS

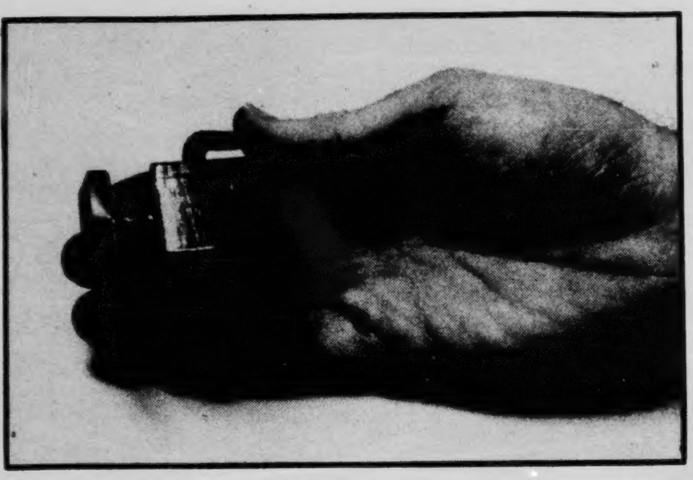
The device is designed to crimp a cylinderical tube at 120° intervals. A semiautomatic feeding device was designed in order to feed the operator one tube at a time to alleviate materials handling problems. An additional semiautomatic feeding device was also developed that would position the tube over the forming mandrel and remove it after forming. To operate the machine, the operator places the tube in a cradle of the feeding device, activates a pneumatic valve and disposes of the tube after forming. The activation of the pneumatic valve begins the process with electronic hardware sequencing the feeding, forming and retraction operation.

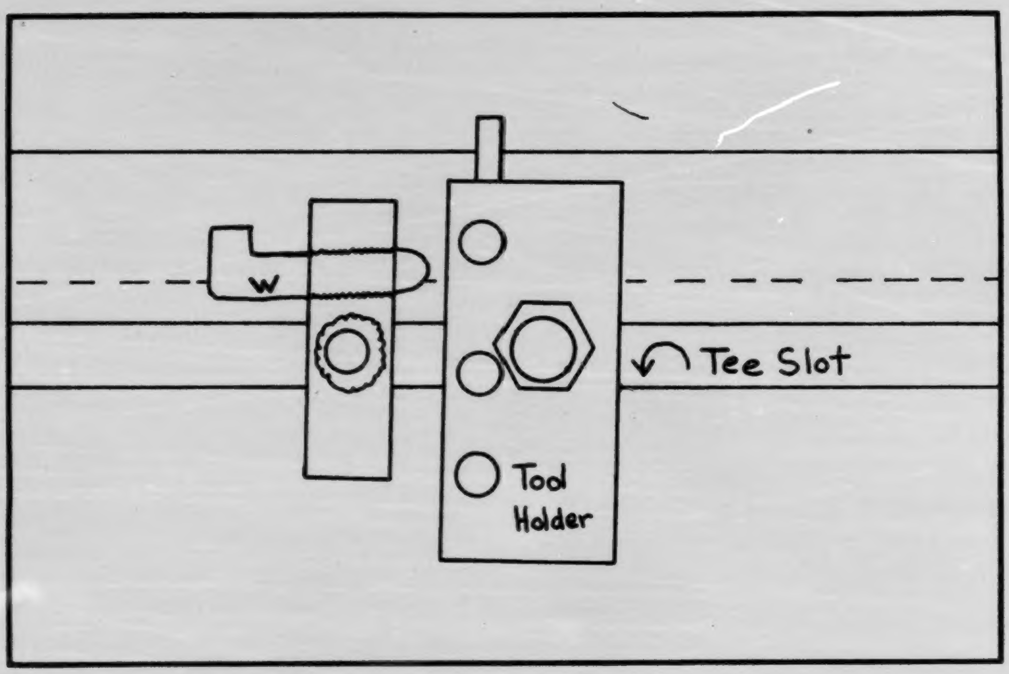
The parts feeder mechanism could be used wherever cylinderical tubing is utilized.

(Information provided by John H. Leslie, Jr., Rehabilitation Engineering Center.)

TOOL ADJUSTING BLOCK, LATHE OPERATION






W
Tee Slot
Tool
Holder

Photographs courtesy of
Jeff Hamm, WVSC, diagram
redrawn by Terri Bleck,
WVSC

TOOL ADJUSTING BLOCK, LATHE OPERATION

DEVELOPER

Jerome Golner
Golner Precision Products
354 Cottonwood Avenue
Hartland, WI 53029

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Machine Trades: Lathe Operation

PROBLEM(S) IT OVERCOMES

moving a lathe's tool holder precisely when one cannot see

FIELD TESTED

yes

used in one factory by one blind employee

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

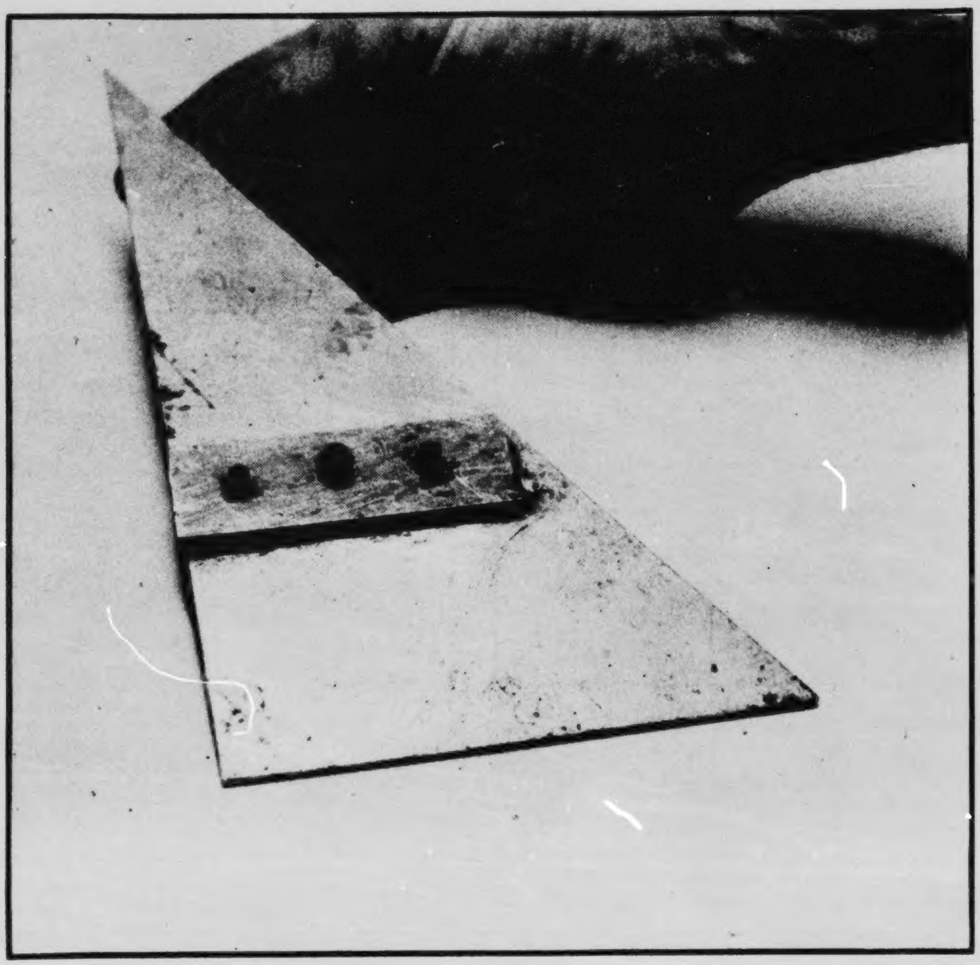
no

HOW IT WORKS

The tool adjusting block can be clamped at the side of a tool holder and 1/4-20 screw can be advanced or retracted to give accurate tool holder movement. For example, to move the tool holder .050 to the right, clamp the tool adjusting block next to the tool holder, turn the 1/4-20 screw until it touches the holder. Loosen the tool holder, advance the 1/4-20 screw one turn, and retighten tool holder.

(Information based on personal communication with Jerome Golner.)

TRIANGLE, LATHE SET-UP



Photograph courtesy of
Jeff Hamm, WVSC

TRIANGLE, LATHE SET-UP

DEVELOPER

Jerome Golner
Golner Precision Products
354 Cottonwood Avenue
Hartland, WI 53029

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Machine Trades: Lathe Operation

PROBLEM(S) IT OVERCOMES

lining up the compound on a 10" lathe when one cannot see

FIELD TESTED

yes

used in one factory by one blind employee

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

no

FOR SALE

no

HOW IT WORKS

The triangle is made to line up the compound on a lathe (10" South Bend in this case). If the "tee slot key" is inserted in the lath's compound "tee slot", the edge of the triangle can be brought up against the lathe's chuck, thus either aligning it at zero degrees, 30 degrees, or 90 degrees. Another triangle is used for other angles, such as 15 degrees, 35 degrees, 45 degrees, etc.

(Information based on personal communication with Jerome Golner.)

VISUAL PROCESS INSPECTION STATION

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Photograph courtesy of John
H. Leslie, Jr.

VISUAL PROCESS INSPECTION STATION

DEVELOPER

Rehabilitation Engineering Center
2021 North Old Manor
Wichita, KS 67208
(316) 688-1888

CONTACT PERSON

Leonard Anderson
Rehabilitation Engineering Center
2021 North Old Manor
Wichita, KS 67208
(316) 688-1888

WHERE IT IS USED

Machine Trades

PROBLEM(S) IT OVERCOMES

examining plates with numbers upside down and backwards; difficulty handling materials

FIELD TESTED

yes

Center Industries Corporation - Wichita, KS

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

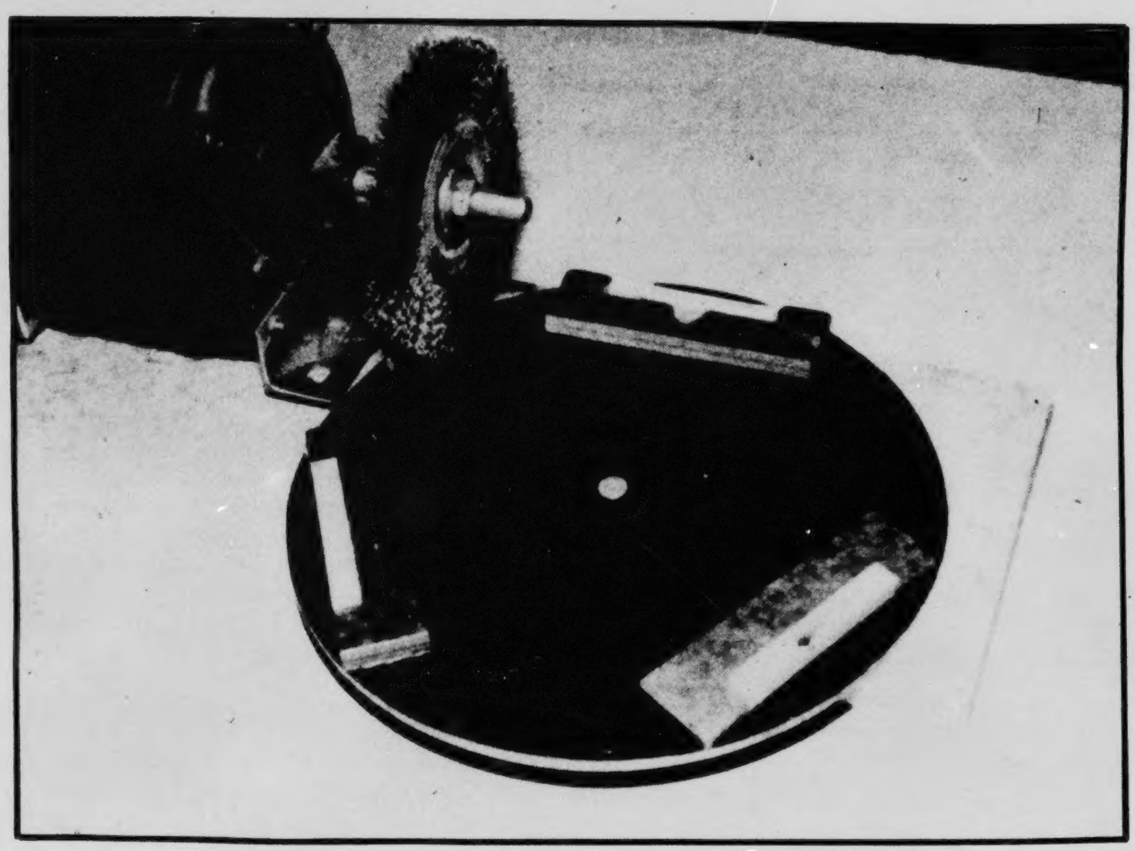
no

HOW IT WORKS

License plates were manufactured and, after processing, were disposed on a conveyor line upside down and backwards. In order to allow a severely handicapped person to inspect the plates, a mirror was installed at an approximate 60° angle in front of the person. This allowed the inspector to look at the mirror image of the license plates rather than the upside down and backwards configuration coming out of the punch press process. The mirror was tilted at an angle such that the inspector could view the tag comfortably while seated in a wheelchair. An air jet under the control of the inspector was directed across the line perpendicular to the direction of the motion of the conveyor line. A scrap metal container was located on the opposite side of the line from the air jet to receive the rejected product. The air jet was controlled by means of an electrically operated solenoid valve. This allowed the inspector to inspect the quality of the license plates and to reject them by pushing a button activating the air solenoid.

(Information provided by John H. Leslie, Jr., Rehabilitation Engineering Center.)

WIRE BRUSH CLEANING OF SMALL PARTS



Photograph courtesy of California Department of Rehabilitation

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WIRE BRUSH CLEANING OF SMALL PARTS

DEVELOPER

Charles Eckles
Independent Contract
Consultant
(213) 360-4180

CONTACT PERSON

California Department of
Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Cleaning

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

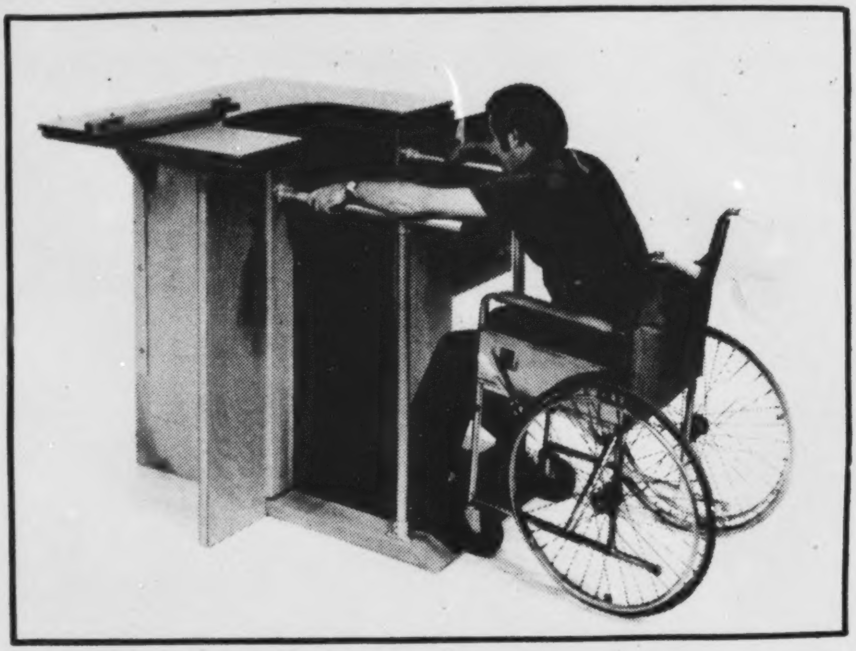
Wire brushing by hand is not a practical method for cleaning such materials as containers of tile grout, as pictured on the opposite page. A motorized wire brush and rotary positioning table, shown in the photo can be used for brushing, cleaning and finishing the tile samples. The fine strand wire wheel brush is attached to a bench mounted motor. The tiles are then fixed on a turntable and moved by hand under the brush for as long as necessary to do the finishing job.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

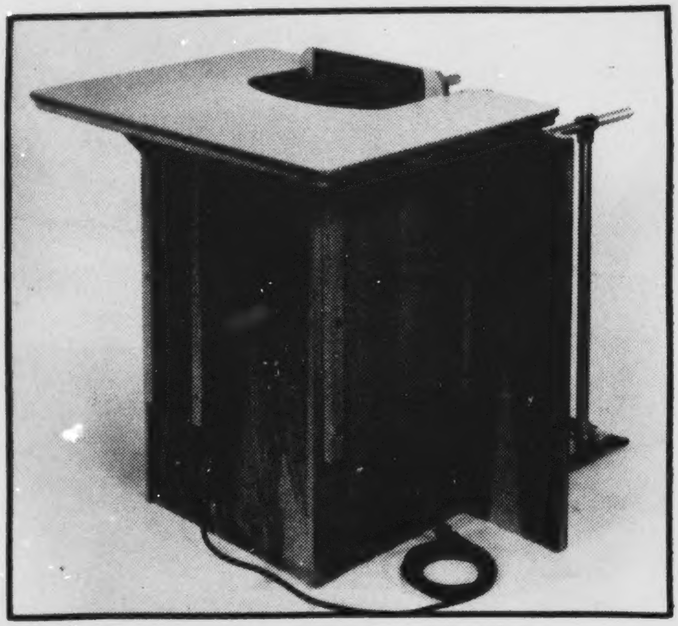
MAINTAINING BALANCE

Adult Stand-In Table 440
Foot Harness 442
LaBerne Gear Lift Stand-In Table 444
Levo^{TM} Stand-Up^{TM} Wheelchair 446
"Mainstream" Elevating Wheelchair . . . 448
Portable Standing Frame 450
Standing Platform 452

ADULT STAND-IN TABLE



Hydraulic



Electric

Photographs courtesy of
Hausmann Industries

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ADULT STAND-IN TABLE

DEVELOPER

Hausmann Industries
130 Union Street
Northvale, NJ 07647
(201) 767-0255

CONTACT PERSON

Rose Rowan
Advertising Manager
Hausmann Industries
130 Union Street
Northvale, NJ 07647
(201) 767-0255

WHERE IT IS USED

Any job that requires sustained standing

PROBLEM(S) IT OVERCOMES

confinement to a wheelchair

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

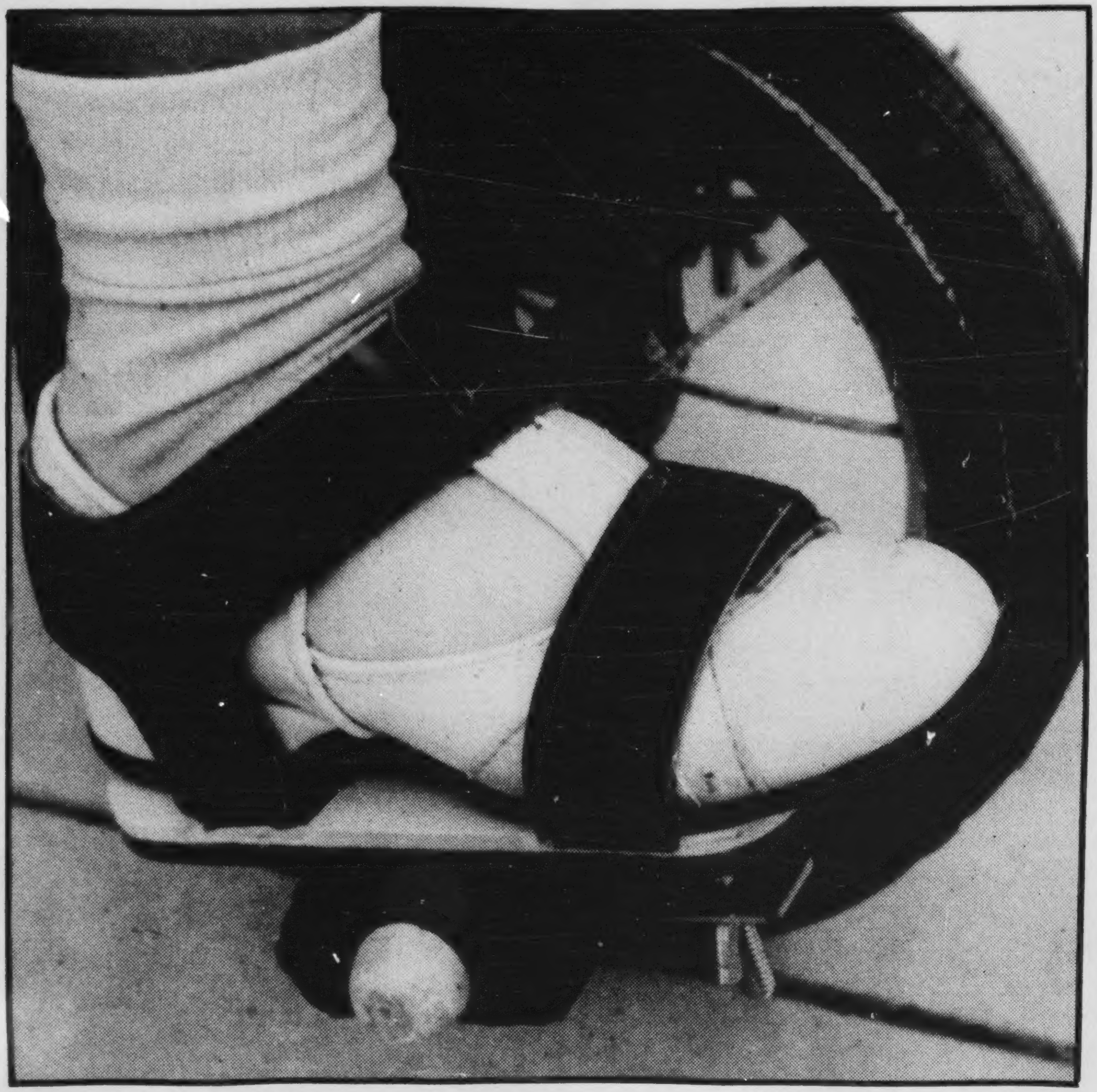
Hausmann Industries
130 Union Street
Northvale, NJ 07647

HOW IT WORKS

Designed for adult use, the table top surface, 32" x 42" with an 18" cut-out, is made of stainproof heavy gauze plastic. The top can be raised or lowered electrically and automatically to any desired height from 40" to 60" while the user is held securely in a standing position by the rigid back panel. The table also has a backrest, an adjustable knee support, parallel bars and an inclined sure-grip rubber matted platform. A hydraulically operated model is also available.

(Information based on Hausmann catalog.)

FOOT HARNESS



Photograph courtesy of Consumer
Care Products, Inc.

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FOOT HARNESS

DEVELOPER

Terrand B. Grall
Route 3
Sheboygan Falls, WI 53085
(414) 467-2393

CONTACT PERSON

Sue Windeck - Light Foot School
111 First Street
Sheboygan Falls, WI 53085
Sue Persch - Curative Workshop of Milwaukee
Milwaukee, WI 53226

WHERE IT IS USED

Sedentary Work

PROBLEM(S) IT OVERCOMES

foot positioning

FIELD TESTED

yes

Light Foot School - Sheboygan Falls, WI
Curative Workshop of Milwaukee-Mil., WI

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

yes

FOR SALE

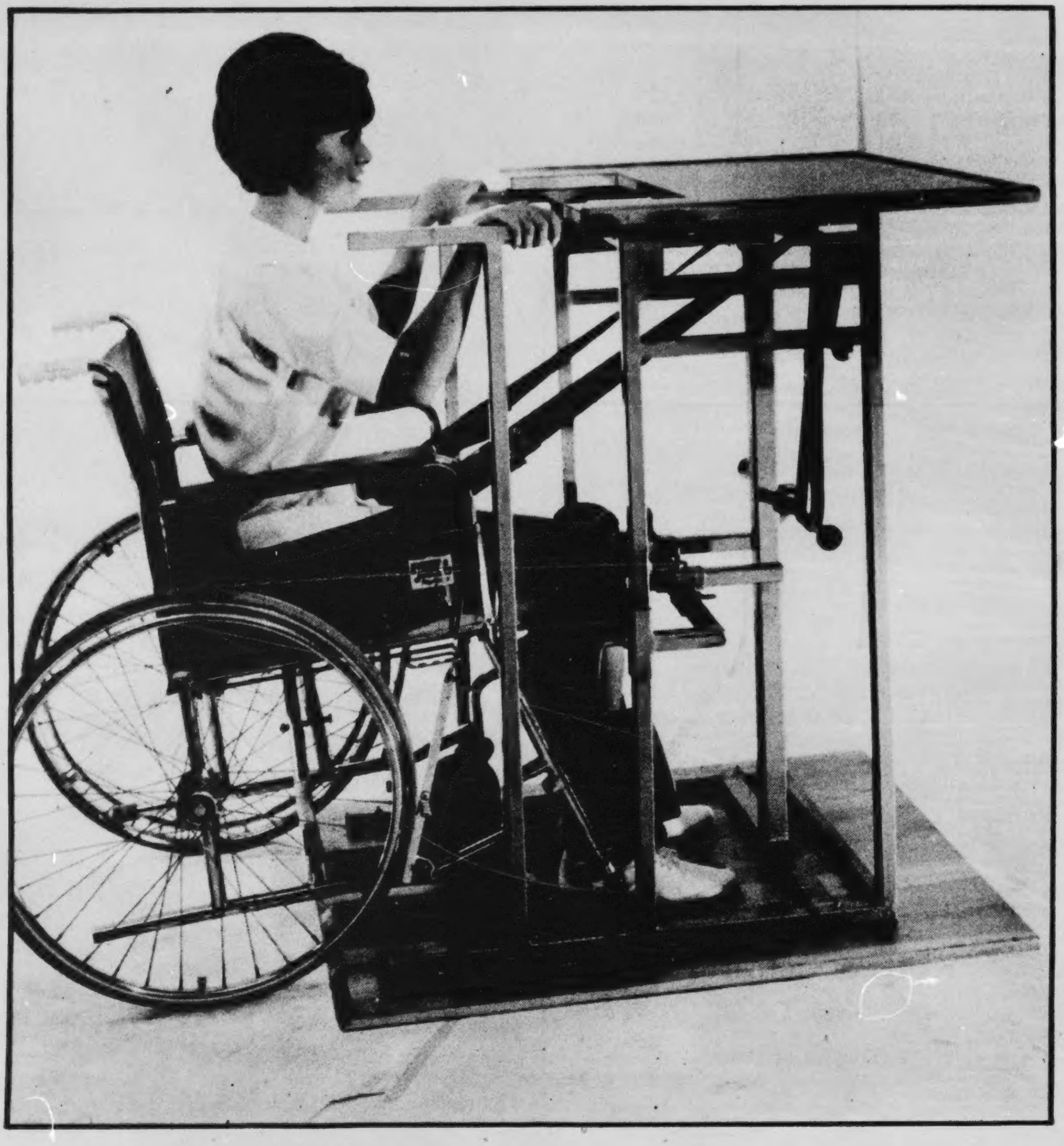
Consumer Care Products Inc.
Sheboygan Falls, WI 53085
or
Achievement Products
P.O. Box 547
Mineola, NY 11501
$57.00 a pair as of January, 1980

HOW IT WORKS

Each harness has three parts: a leather toe strap with "velcro fasteners"; a leather ankle-heel strap with "velcro fasteners" and a laminated foot pad with attachment bar, bolts and wing nuts. It is available in three sizes - 1¼" - 2¼" wide x 3¼" - 6" long; 2½" - 3½" wide x 6" - 9¼" long or 3½" - 4¼" wide x 9¼" - 12¼" long. The user can strap a foot in using one hand. It can be used with or without a shoe.

(Information based on Consumer Care Products, Inc. literature.)

LABERNE GEAR LIFT STAND-IN TABLE



Photograph courtesy of
LaBerne Manufacturing Co., Inc.

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LABERNE GEAR LIFT STAND-IN TABLE

DEVELOPER

W. E. Berne
P.O. Box 9245
Columbia, SC 29290
(803) 776-1115

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Any job that requires sustained standing

PROBLEM(S) IT OVERCOMES

confinement to a wheelchair

FIELD TESTED

yes

in use in physical therapy departments all over U.S.A. and abroad

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

LaBerne Manufacturing Co., Inc.
P.O. Box 9245
Columbia, SC 29290

$895.00 F.O.B. Columbia, SC

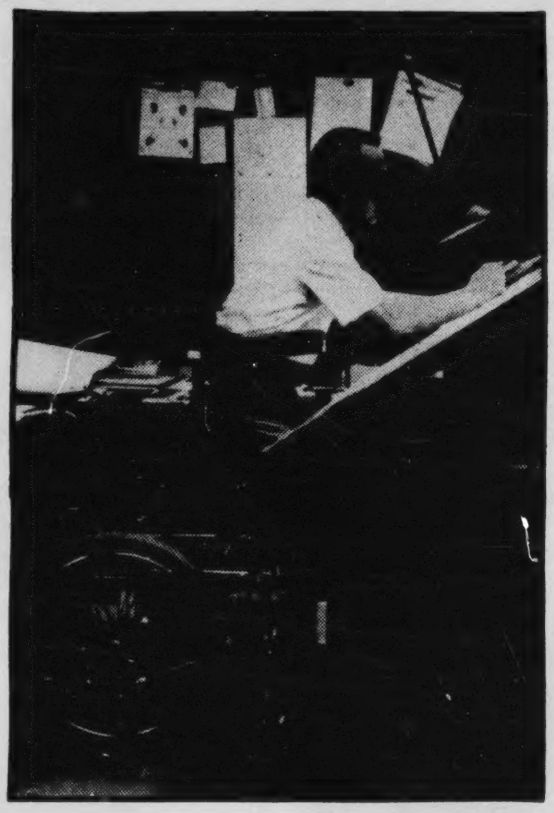
HOW IT WORKS

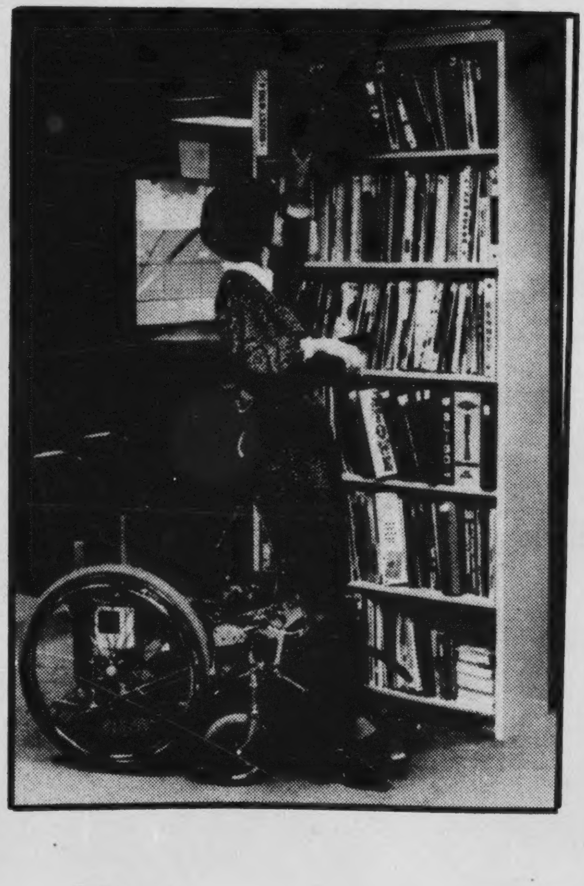
The table is designed for people who have extremity paralysis. It has a hip and back harness, adjustable padded knee and chest supports and an adjustable back support. The top measures 29"x29"x43" and has a cut-out.

A harness is placed around the user who is lifted from the wheelchair to a standing position by turning the gear crank which automatically locks the user into the standing position. The user is returned to the chair in the same way. It is made of tubular steel and uses an enclosed worm gear. An electric model is also available.

(Information based on LaBerne catalog, September, 1978.)

LEVO^{TM} STAND-UP^{TM} WHEELCHAIR





Photographs courtesy of American Stair-Glide Corporation

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LEVO™ STAND-UP™ WHEELCHAIR

DEVELOPER

American Stair-Glide
4001 E. 138th St.
Grandview, MO 64030
(816) 763-3100

CONTACT PERSON

Sales Section
American Stair-Glide
4001 E. 138th St.
Grandview, MO 64030
(816) 763-3100

WHERE IT IS USED

Any job that requires sustained standing

PROBLEM(S) IT OVERCOMES

confinement to a wheelchair

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

American Stair-Glide Corporation
4001 E. 138th St.
Grandview, MO 64030

Price quoted by dealer.
Contact American Stair-Glide for location of nearest dealer.

HOW IT WORKS

LEVO™ is a manual wheelchair with a lifting device activated by 10 D-cell nickel cadmium batteries. At the touch of a constant-pressure switch located in the armrest, the user is lifted to the desired height up to a standing position, and returned to a sitting position.

A velcro-fastened chest strap and a padded leg support with a belt and buckle, secure the user while standing. The chair is designed to support up to 200 lbs. It folds for storage and transport.

(Information based on American Stair-Glide Corporation literature.)

"MAINSTREAM" ELEVATING WHEELCHAIR

Photographs courtesy of
Summit Services

"MAINSTREAM" ELEVATING WHEELCHAIR

DEVELOPER

Summit Services
535 Division Street
Campbell, CA 95008
(408) 378-1251

CONTACT PERSON

William Redmond
Glenn Brown
Summit Services
535 Division Street
Campbell, CA 95008
(408) 378-1251

WHERE IT IS USED

Manufacturing
Technical

PROBLEM(S) IT OVERCOMES

inaccessibility of many educational and work environments; this wheelchair

FIELD TESTED

yes

REGULATORY APPROVAL

FDA

WARRANTY PROVIDED

yes

FOR SALE

Summit Services
535 Division Street
Campbell, CA 95008

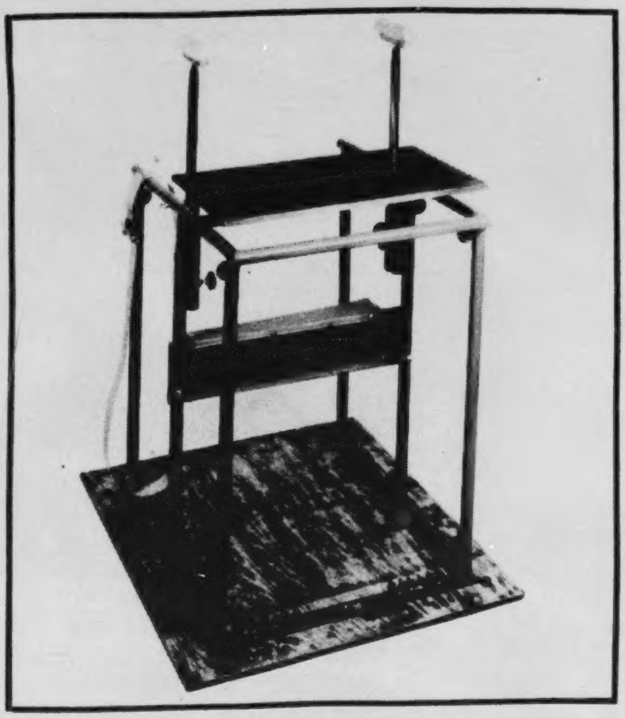
approximately $3,000.00

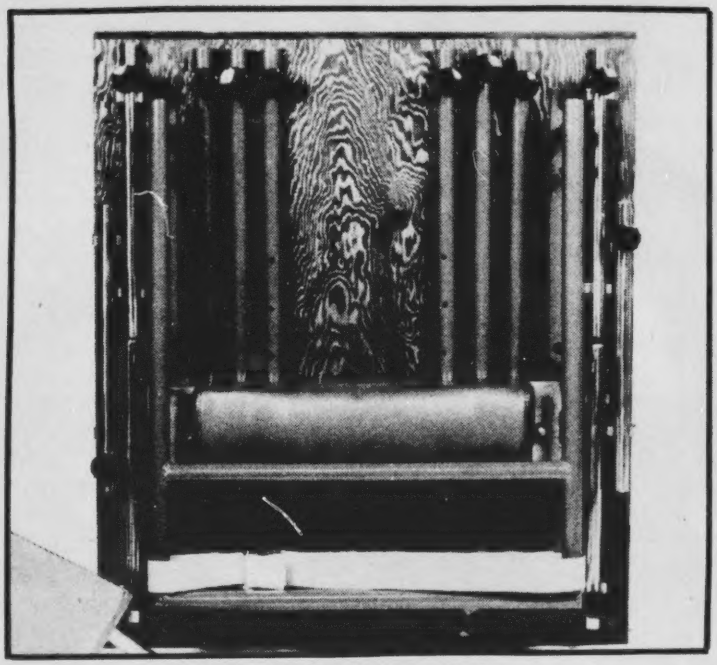
HOW IT WORKS

The following information was provided by Robert N. Brown, Chairman, Division of Technology and Engineering, Chabot College: By using this device, you adapt the person to any environment. At Chabot College it would have cost $15,000.00 to just adapt our machine shop, not to mention our chemistry, biology, physics and photo labs. However, with a few of these chairs on campus we adapt each wheelchair user to any environment. The chair is comfortable, safe, easy rolling and electrically controlled as to up and down. The purpose of the device is to allow persons to train on normal equipment and in normal labs so that they can go easily out into industry or business and assume high paying jobs. The "Mainstream Elevating Wheelchair" is manually operated with handwheels (same manner as conventional wheelchairs) but the seat, handwheels and footrest electronically elevate 18 inches above conventional wheelchair height. This design feature permits the occupant to be "fully mobile" at any height they wish or need to be to perform functions the same as a standing person.
This wheelchair is extremely stable at all heights and its maneuverability is excellent in small areas because it is no wider than conventional wheelchairs but in the full-up position it is 6 inches shorter due to the fact that the footrest tucks under the seat as it rises.

(Information provided by Robert N. Brown.)

PORTABLE STANDING FRAME





Photographs courtesy of
Arthur L. Castor

Frame in folded position.

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PORTABLE STANDING FRAME

DEVELOPER

Arthur L. Castor
1409 W. 156th Street
Compton, CA 90220
(213) 637-0891

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Any job that requires sustained standing

PROBLEM(S) IT OVERCOMES

standing with needed support

FIELD TESTED

yes

Veterans Administration - Brooklyn, NY

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

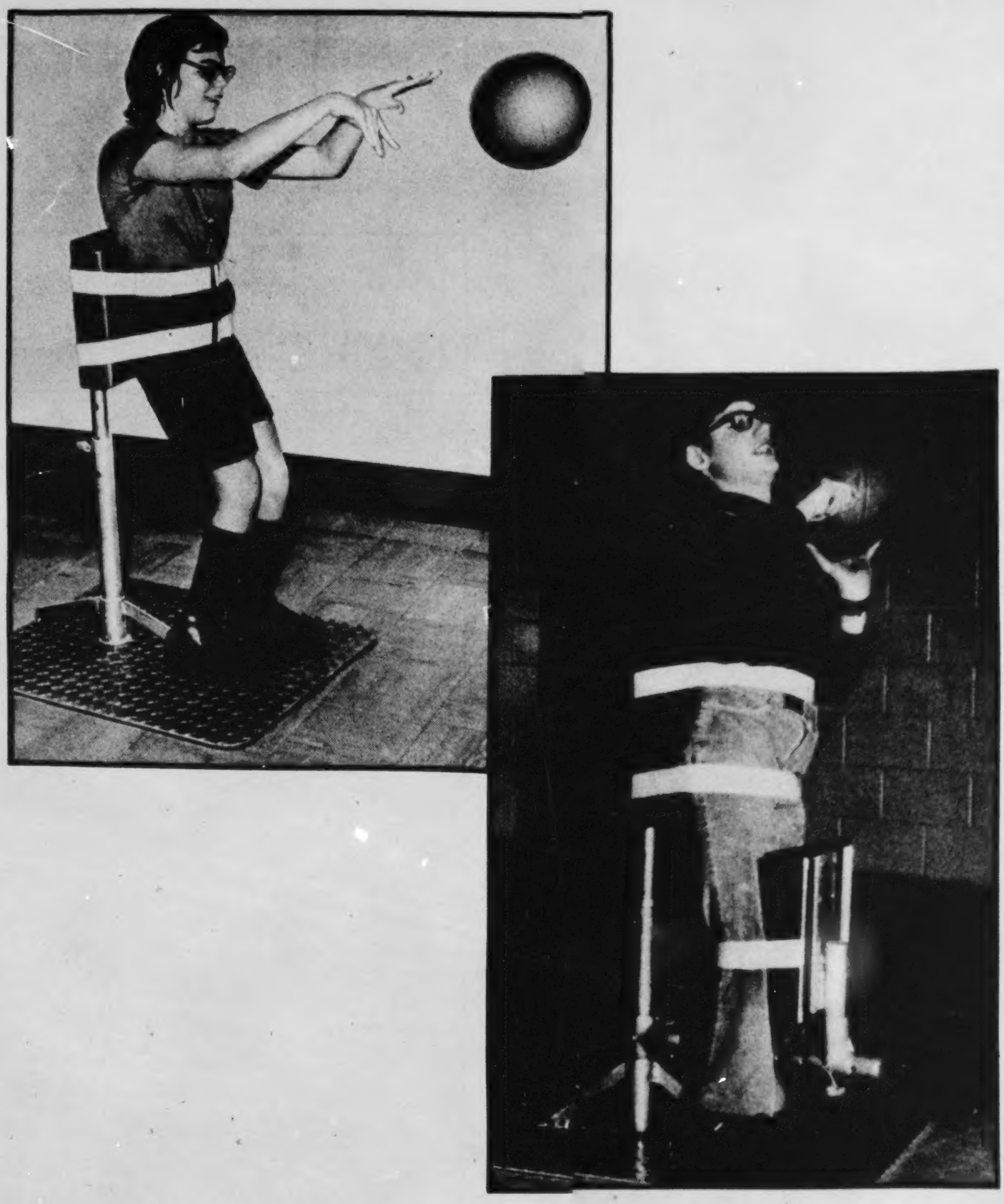
Arthur L. Castor Company
1409 W. 156th Street
Compton, CA 90220

HOW IT WORKS

Security belts strap the person to the frame and an adjustable board provides a work surface. The unit folds up for transport and storage.

(Information based on Castor Company literature.)

STANDING PLATFORM



Photographs courtesy of
Jayfro Corporation

STANDING PLATFORM

DEVELOPER

Jayfro Corporation
P.O. Box 400
Waterford, CT 06385
(203) 447-3001

CONTACT PERSON

Jim Bliss
Jayfro Corporation
P.O. Box 400
Waterford, CT 06385
(203) 447-3001

WHERE IT IS USED

Standing

PROBLEM(S) IT OVERCOMES

standing balance

FIELD TESTED

yes

Seaside Regional Center - Waterford, CT

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Jayfro Corporation
P.O. Box 400
976 Hartford Turnpike
Waterford, CT 06385

$263.00 with knee support pad
F.O.B. Waterford, CT

HOW IT WORKS

Designed in consultation with recreation and physical therapists, the unit is designed to assist standing balance without limiting use of the upper extremities. It is made of lightweight, heavy-duty aluminum with a footplate to prevent slipping and a knee support pad for those unable to maintain positioning while weight bears on the lower extremities. Both the padded back rest and knee support have straps and are height adjustable.

(Information based on Jayfro Corporation catalog.)

MATHEMATICS

Calculator, Expanded Keyboard 456

Calculator Guide 458

Calcu-Tac 460

Canon Electronic Calculator with Printout, Display and Voice 462

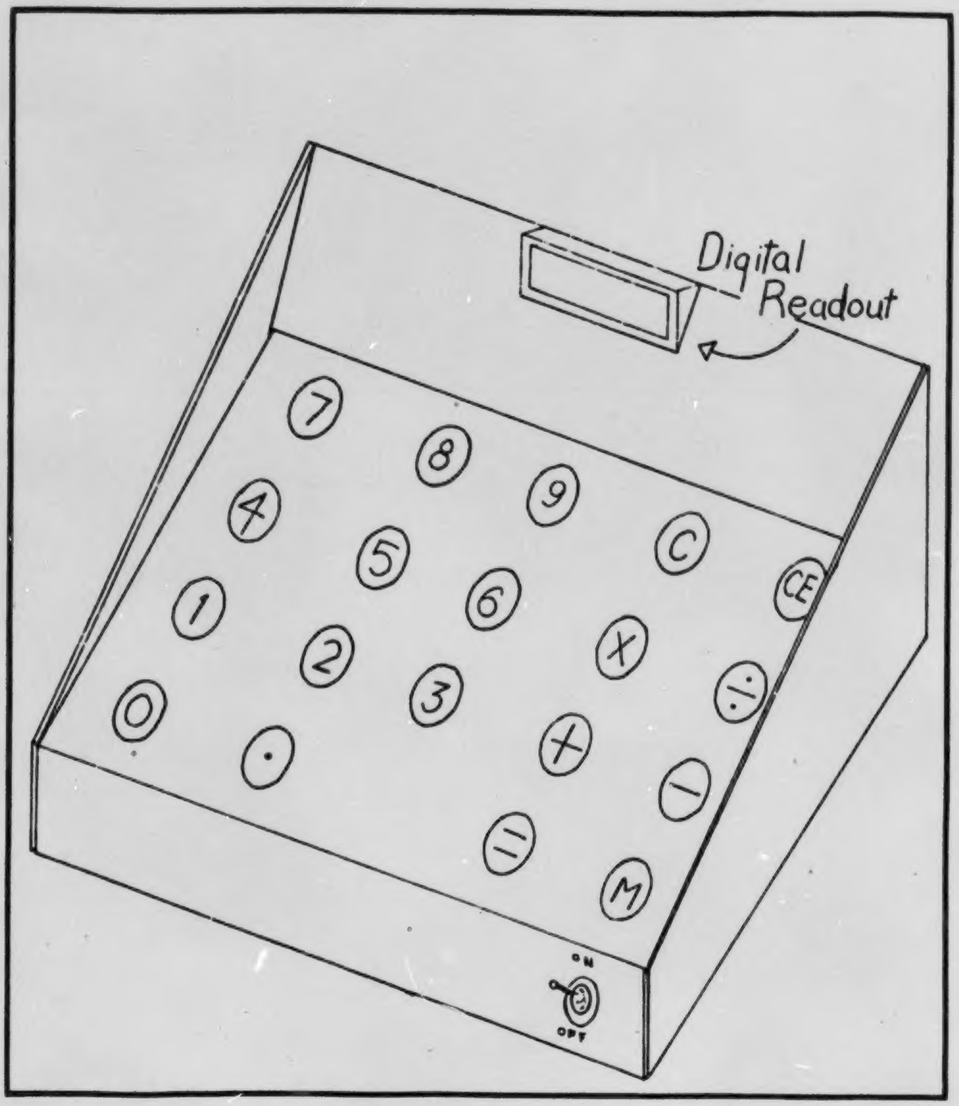
Graphic Aid for Mathematics 464

Keyboard Guard 466

Scientific Calculator Braille 468

Speech Plus Talking Calculator . . . 470

CALCULATOR, EXPANDED KEYBOARD


Digital Readout
7
8
9
4
5
6
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CE
1
2
3
X
÷
0
.
+
−
=
M
ON
OFF

Illustration courtesy of
Carol Schaeffler

CALCULATOR, EXPANDED KEYBOARD

DEVELOPER

Carol Schaeffler
John Mauro
United Cerebral Palsy
622 Foster Avenue
Brooklyn, NY 11230
(212) 859-8850

CONTACT PERSON

Carol Schaeffler
United Cerebral Palsy
Rehabilitation Engineering
Department
622 Foster Avenue
Brooklyn, NY 11230
(212) 859-8850

WHERE IT IS USED

Mathematics

PROBLEM(S) IT OVERCOMES

it allows individuals who lack fine motor skills to operate commercially available calculators

FIELD TESTED

yes

in process at United Cerebral Palsy, Inc.

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

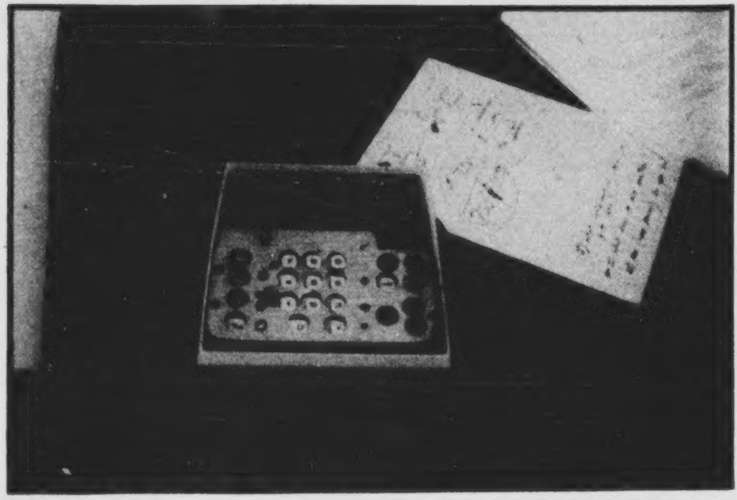
no

HOW IT WORKS

Using the basic circuitry of a commercially available calculator, an enlarged keyboard measuring 16x18 inches was constructed. The keys are one inch in diameter, widely spaced and recessed. Slight pressure on a key actuates the desired function. The display readout was enlarged to ½ inch symbols and relocated on top of the keyboard to facilitate viewing the readout.

(Information provided by Carol Schaeffler.)

Calculator guide with side stands



Calculator guide in place on calculator

440

CALCULATOR GUIDE

DEVELOPER
Dan Golden
CETA Welding Instructor
Wisconsin Indianhead
Technical Institute
New Richmond Campus
1019 South Knowles Ave.
New Richmond, WI 54017
(715) 246-6561

CONTACT PERSON
Jeanette M. Richardson,
Supervisor
Office & Marketing
Education Department
WITI-New Richmond Campus
1019 South Knowles Ave.
New Richmond, WI 54017
(715) 246-6561

WHERE IT IS USED
When using calculator

PROBLEM(S) IT OVERCOMES

limited hand dexterity and control

FIELD TESTED

yes

in use at WITI - New Richmond

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

When the guide is placed exactly over the keys of the calculator, screws, in the guide, are used to attach it to the calculator. (Holes were previously drilled into the calculator.) The guide makes it possible to accurately press the intended keys, eliminating the problem of depressing the wrong key or two keys because of limited control. Side stands allow the guide to be held off of the calculator.

(Information based on personal interview.)

CALCU-TAC

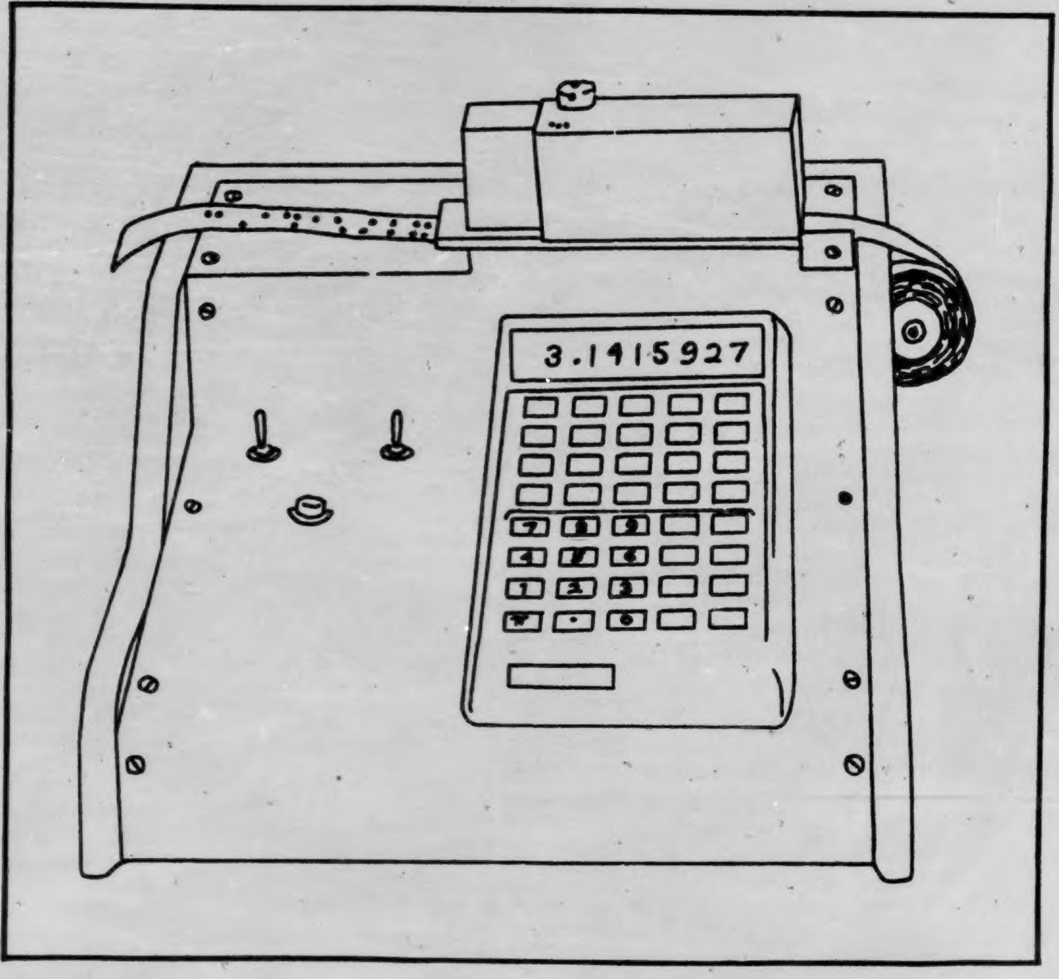


Illustration courtesy of
Science for the Blind
Products

442

CALCU-TAC

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind
  Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

Mathematics

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

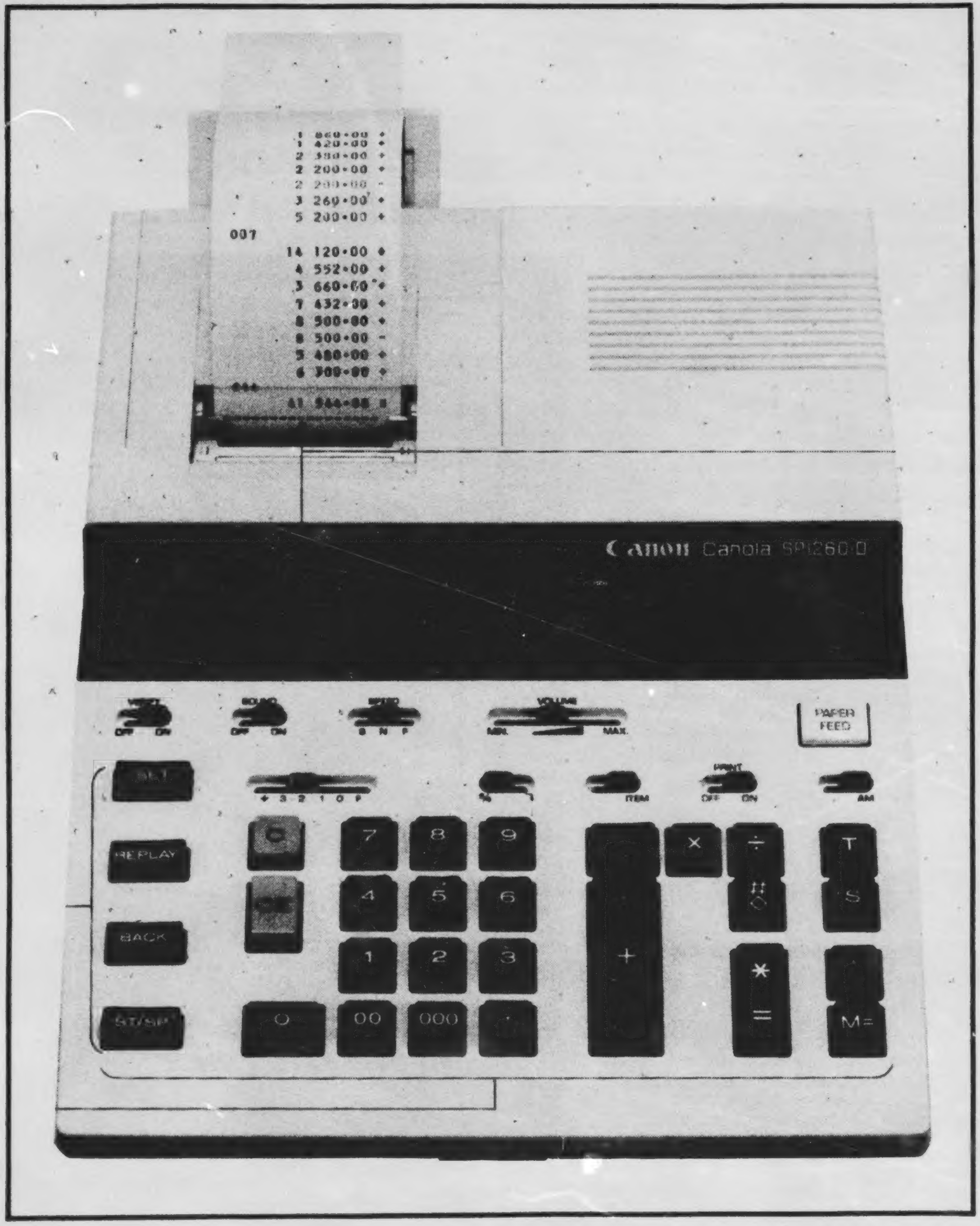
$895.00

HOW IT WORKS

The Calcu-Tac is an electronic calculator with a braille printout. Calculations are performed on an electronic calculator. Whenever a printout is required, a "print" button is pressed and the braille printer prints all the numbers in the display in proper sequence including decimals.

(Information based on Science for the Blind literature.)

CANON ELECTRONIC CALCULATOR WITH PRINTOUT, DISPLAY AND VOICE


Canon Canola SP1260-D
PAPER FEED
VOLUME
MIN.
MAX.
PRINT
OFF
ON
ITEM
AM
SET
REPLAY
BACK
ST/SP
C
CE
7
8
9
4
5
6
1
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3
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M=

Photograph courtesy of
Canon, U.S.A., Inc.

CANON ELECTRONIC CALCULATOR WITH PRINTOUT, DISPLAY AND VOICE

DEVELOPER

Canon, U.S.A., Inc.
Head Office
10 Nevada Drive,
Lake Success
Long Island, NY 11042
(516) 488-6700

CONTACT PERSON

WHERE IT IS USED

Bookkeeping
Mathematics

PROBLEM(S) IT OVERCOMES

inability to see calculated numbers

FIELD TESTED

yes

REGULATORY APPROVAL

yes
Underwriters' Laboratory

WARRANTY PROVIDED

yes

FOR SALE

see distributor list in appendix
suggested list price $399.00

HOW IT WORKS

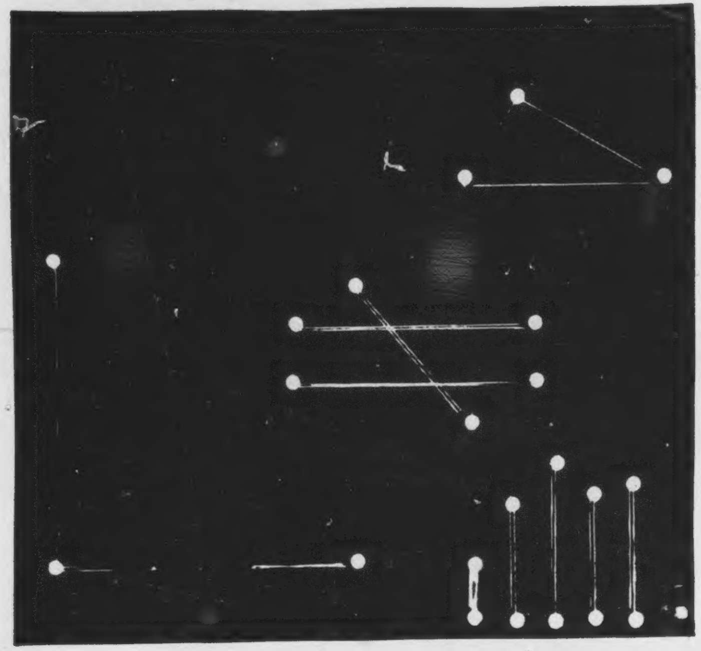
In addition to a visual printout and display, this calculator has the following capabilities:

- Voice synthesizer calls out keyboard entries
- A key vocally repeats the steps of calculations
- A key automatically produces any number of duplicate printouts
- Simple reentry of individual data items for quick error correction.

The unique voice synthesizer calls out numerals and functions as they are keyed in, or reads out data stored in the memory. The voice snythesizer is available in English, French, German and Japanese languages. Two switches control the speed and volume of the sound verification.

(Information reprinted with permission from Canon literature.)

GRAPHIC AID FOR MATHEMATICS



Photograph courtesy of
American Printing House
for the Blind

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GRAPHIC AID FOR MATHEMATICS

DEVELOPER

Manufactured by:
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206
(502) 895-2405

WHERE IT IS USED

Education

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

information not available

FOR SALE

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

$21.00

HOW IT WORKS

This consists of an 18"x19"x1" cork composition board, 3 flat spring wires, 14 plastic-headed pushpins and a supply of rubber bands. These are used in the construction of geometrical and other mathematical figures necessary for study of arithmetic, algebra, geometry, trigonometry and calculus.

(Information based on American Printing House for the Blind literature.)

KEYBOARD GUARD

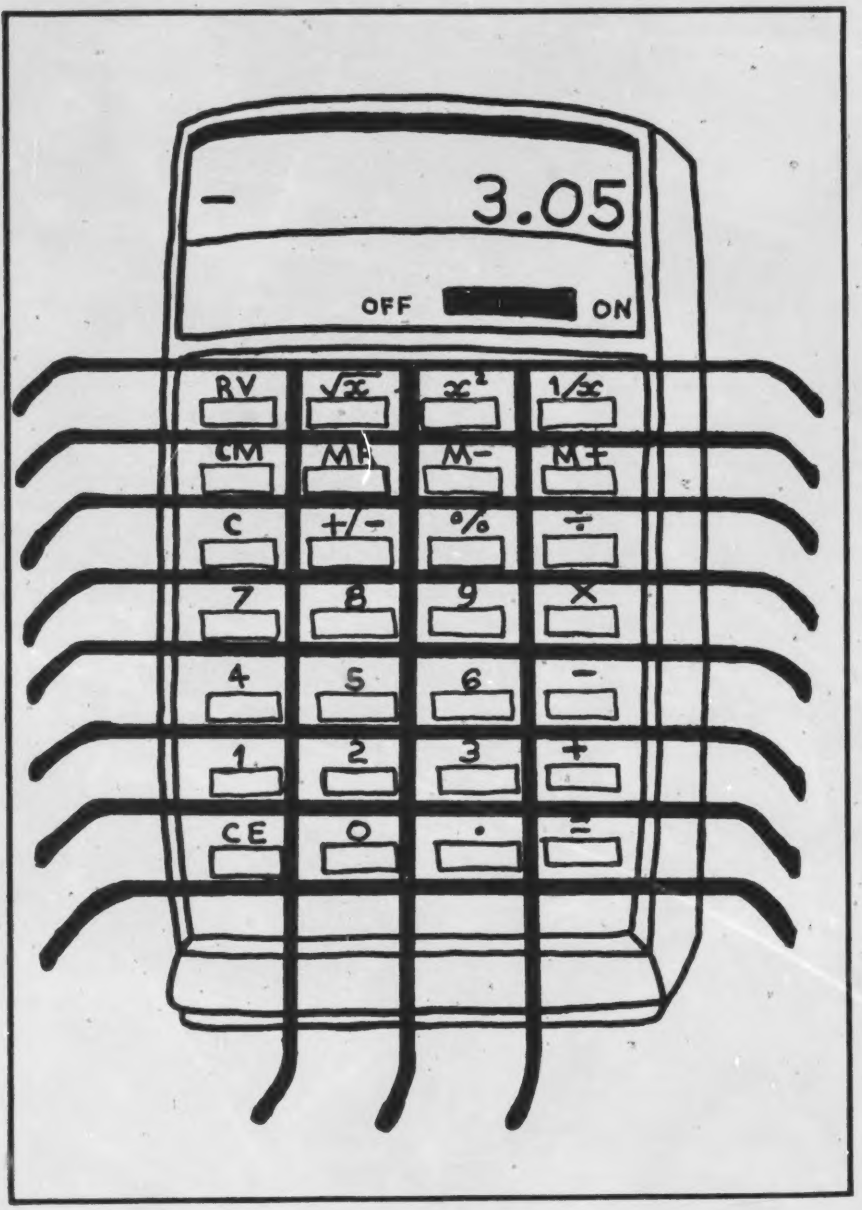

- 3.05
OFF
ON
RV
√x
x²
1/x
CM
MR
M-
M+
C
+/-
%
÷
7
8
9
×
4
5
6
−
1
2
3
+
CE
0
.
=

Diagram courtesy of Ken
Hagmann, redrawn by
Terri Bleck, WVSC

KEYBOARD GUARD

DEVELOPER

Ken Hagmann
Opportunities, Inc.
925 Jefferson Street
Ft. Atkinson, WI
(414) 563-6691

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Communicating
Mathematics
Typing

PROBLEM(S) IT OVERCOMES

motor control problems when using a keyboard

FIELD TESTED

yes

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

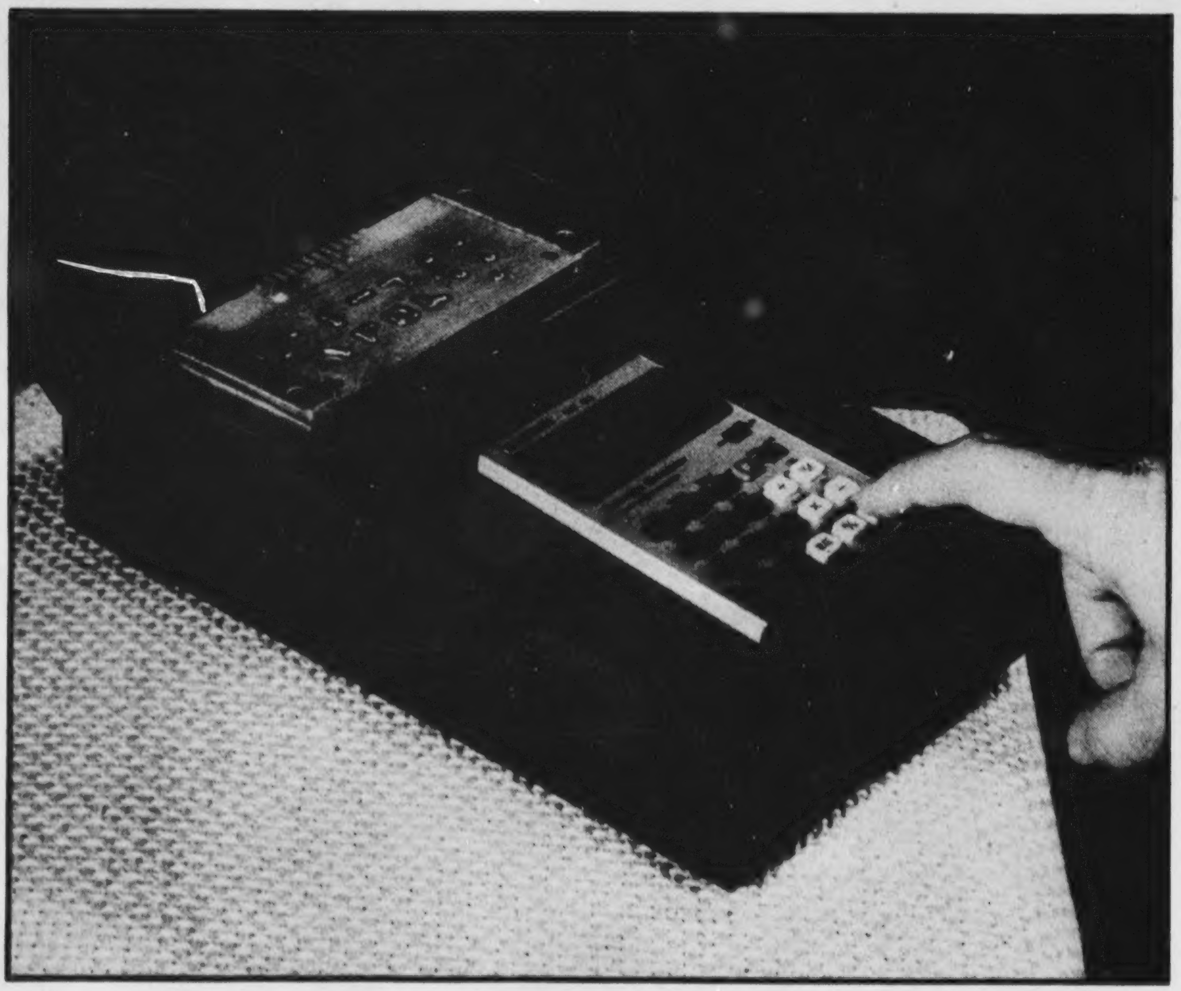
FOR SALE

no

HOW IT WORKS

The removable grid is constructed out of 1/16" diameter brass rod with soldered joints. It can be made for calculators, typewriters and push button phones. This particular type was made to fit 4 calculators in our facility and to be easily switched from one to another, (commercially available ones are not).

(Information provided by Ken Hagmann.)



Photograph courtesy of J.C. Swail

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SCIENTIFIC CALCULATOR BRAILLE

DEVELOPER

J.C. Swail
National Research Council
M-50
Dee R182 Montreal Road
Ottawa Ontario
Canada
K1A 0R8

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Education
Mathematics

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

Canadian N'tl Institute for the Blind-Edmonton; Service Converto Braille Hall-Province of Quebec, Canada

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

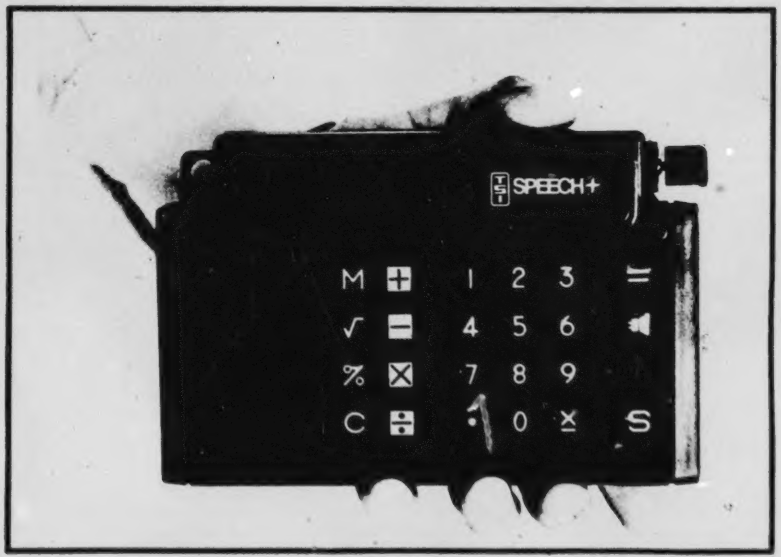
no

HOW IT WORKS

A standard calculator is placed in a unit which presents braille symbols through a combination of touch and sound. There are no moving parts. The same readout can be interfaced to any digit output.

(Information provided by J.C. Swail, N.R.C.)

SPEECH PLUS TALKING CALCULATOR


TSI
SPEECH+
M + 1 2 3 =
√ − 4 5 6
% × 7 8 9
C ÷ . 0 ± S

Photograph courtesy of Telesensory Systems Inc.

SPEECH PLUS TALKING CALCULATOR

DEVELOPER

Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304
(415) 493-2626

CONTACT PERSON

Gayle Bruglar
Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304
(415) 493-2626

WHERE IT IS USED

Bookkeeping
Education
Home Economics
Mathematics

PROBLEM(S) IT OVERCOMES

blindness

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304

$445.00

HOW IT WORKS

The Speech Plus Calculator brings the speed and efficiency of calculator computation to blind people. The calculator's 24 word vocabulary, pronounced in clear electronic speech, provides verification of every keystroke and the results of computations. The Speech Plus Calculator is available in English, French, German and Arabic speaking models. People using the Speech Plus Calculator as a tool in mathematics curriculum find mathematics far more useful. Adults use the calculator to better manage business enterprises and personal finances.

(Information reprinted with permission from Telesensory Systems Inc. literature.)

MEASURING

Braille Rulers 474

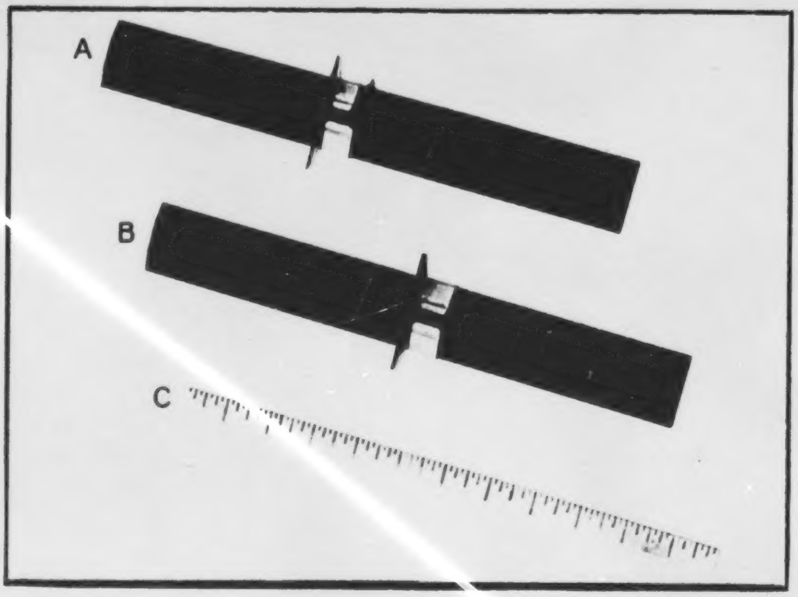
Cutting Lengths of Yarn 476

Cutting Material to Length 478

Rulers 480

Wire Measuring System with Voice Feedback 482

BRAILLE RULERS



Photograph courtesy of
American Printing House
for the Blind

BRAILLE RULERS

DEVELOPER

Manufactured by:
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206
(502) 895-2405

WHERE IT IS USED

Mathematics
Measuring

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

information not available

FOR SALE

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

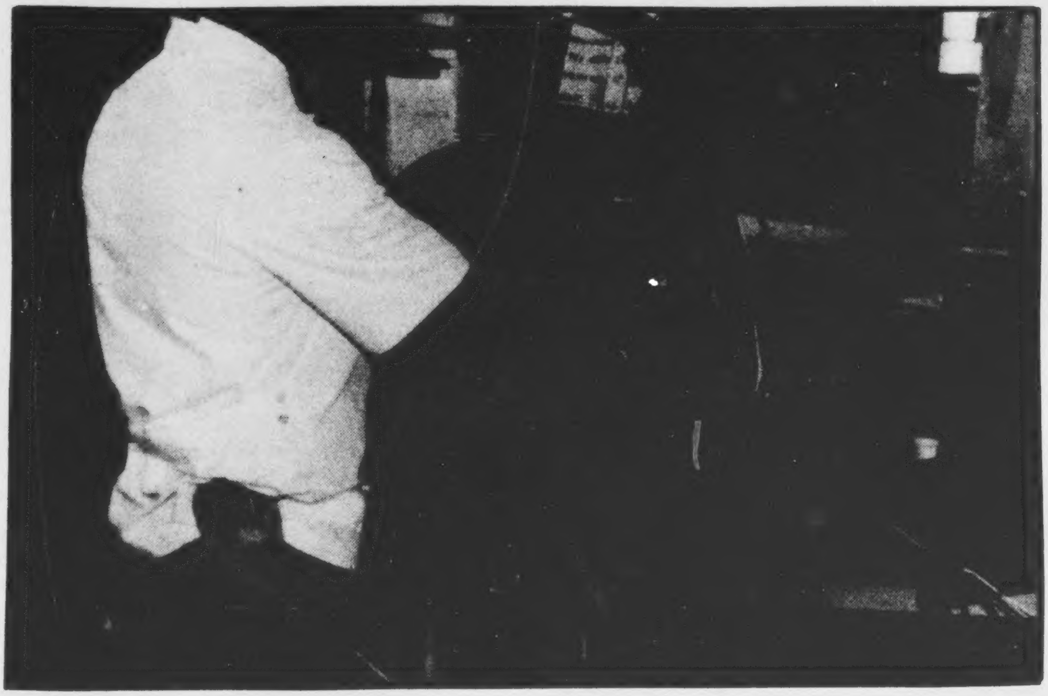
English Measurement Ruler -	$1.65
Metric-English Ruler -	$1.70
APH Glue-down Rule-	$ .50

HOW IT WORKS

The 1-foot English measurement ruler (A) is made of molded black plastic. Inches and fractions are indicated by raised lines, and braille figures are located at the inch divisions. A caliper-slide is included for determination of measurements. The 1-foot Metric-English Measurement Ruler (B) is also made of molded black plastic. The 1- and ½-centimeter intervals are indicated on the scale opposite the English-measurement scale. Braille numbers indicate 2 centimeter marks. The APH Glue-Down Rule (C), is made of a brass strip ½" wide, .01" thick and 12" long. Raised lines indicate the divisions of the rule. Rule may be bonded to sewing machines, band saws, foot shears, cutting or drawing boards, etc. Epoxy glue is recommended.

(Information based on American Printing House for the Blind literature.)

CUTTING LENGTHS OF YARN



Photograph courtesy of California Department of Rehabilitation

CUTTING LENGTHS OF YARN

DEVELOPER

Charles Eckles
Independent Contract
Consultant
(213) 360-4180

CONTACT PERSON

California Department of
Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Measuring

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

This device aids in cutting yarn in different lengths for packaging. A large wheel-type spoked frame, mounted on a tripod, is used. The flat exterior rim has a 15-foot circumference, which is the length of the shortest piece of yarn to be cut. Six strands of different yarns are pulled from a spool supply rack through a series of guides that feed the yarn onto the exterior rim of the wheel as it is turned. For other lengths of yarn, the operator can refer to a chart to determine the number of turns required for each length. As the proper length is reached, the yarn is cut in that spot.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

CUTTING MATERIAL TO LENGTH

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Photograph courtesy of California Department of Rehabilitation

CUTTING MATERIAL TO LENGTH

DEVELOPER

Charles Eckles
Independent Contract
Consultant
(213) 360-4180

CONTACT PERSON

California Department of
Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Measuring

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

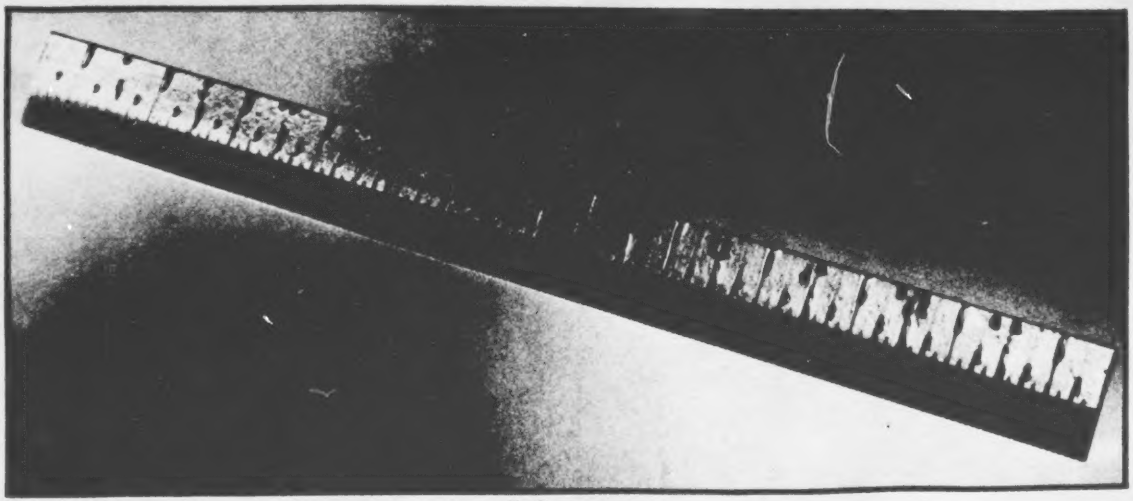
May be made at a minimal cost.

HOW IT WORKS

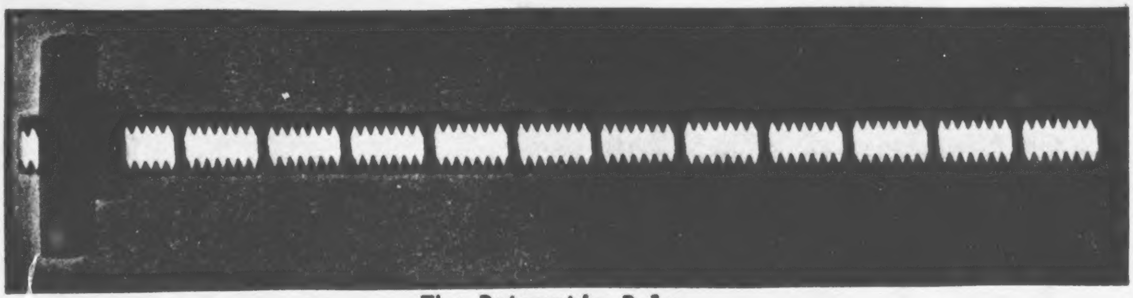
The equipment pictured here is for cutting many pieces of the same material at one time to a fixed length. Commercial equipment for measuring and cutting off electrical wire, lengths of rope, cord, hose, cable or similar stranded forms of material can be used and is relatively inexpensive. Accessory equipment for coiling lengths of measured material to various sized coils for packaging is also commercially available. The circumference of the pick-up reel is made to equal the length of material required. Approximately 50 wraps of material can be made on the winding wheel before it is to the top. The material is then cut along a common line and removed from the reel.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

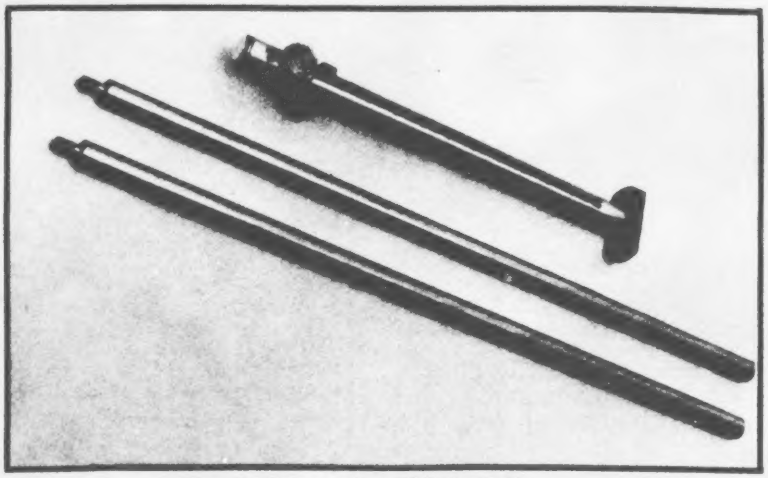
RULERS



Ruler



The Rotomatic Rule



The Telescopic Click Rule

Photographs courtesy of
American Foundation for
the Blind

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RULERS

DEVELOPER

CONTACT PERSON

Alex H. Townsend
American Foundation for the Blind
15 West 16th Street
New York, NY 10011
(212) 620-2169

WHERE IT IS USED

Benchwork
Clerical
Construction
Machining

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundation for the Blind
15 West 16th Street
New York, NY 10011

$1.75 to $40.00

HOW IT WORKS

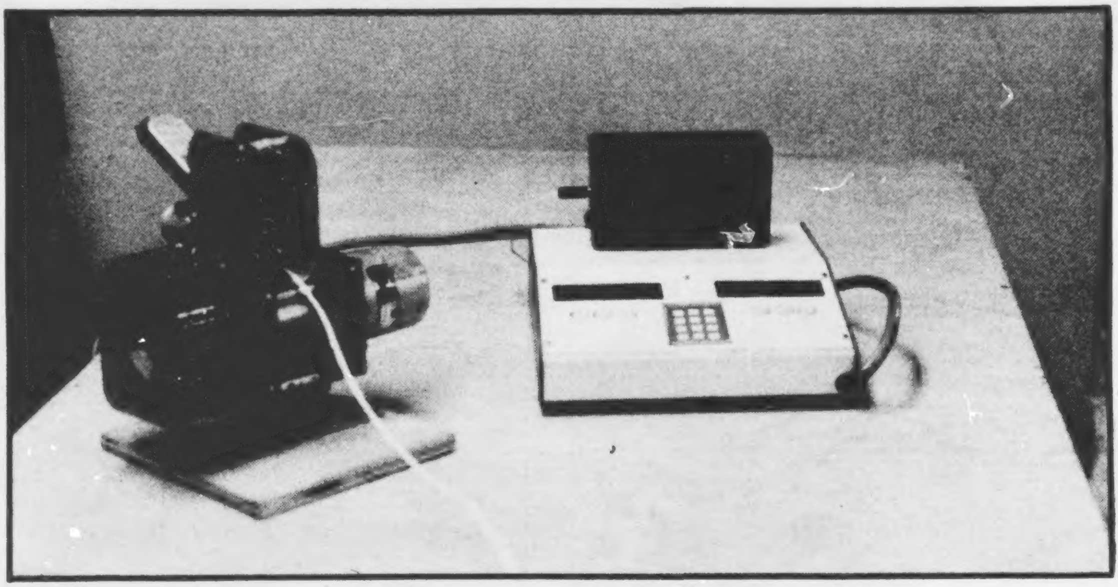
The rulers are made from plastic, wood, steel, aluminum or brass. Most have raised lines or dots to indicate each increment of length. Some use slots or notches for this purpose. Units are available with scales in English, metric or both.

The Rotomatic Rule consists of a 6" aluminum rod threaded at 16 threads per inch. One side of the rod has been milled flat and the opposite side has tactile markings every ½".

The Telescopic Click rule is an anodized aluminum rule which clicks at each 1/16" and has raised graduations at each ½". Six inches from the starting end is a shoulder which allows inside measurement. Depth measurements and outside measurements can also be taken accurately to 1/16".

(Information based on American Foundation for the Blind literature.)

WIRE MEASURING SYSTEM WITH VOICE FEEDBACK



Photograph courtesy of Don Warren and Ricardo Cerna

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WIRE MEASURING SYSTEM WITH VOICE FEEDBACK

DEVELOPER

Clinical Convenience Products
Contracting Serv. Div.
2070 Helena Street
Madison, WI 53704
(608) 251-2882

CONTACT PERSON

Don Warren
2070 Helena Street
Madison, WI 53704
(608) 251-2882

WHERE IT IS USED

Measuring

PROBLEM(S) IT OVERCOMES

visual impairment; length of wire can be measured through vocal read out

FIELD TESTED

no

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Clinical Convenience
2070 Helena Street
Madison, Wisconsin 53704

price range - $600 - $1900, subject to requirements

HOW IT WORKS

System measures wire up to 3/4 inch diameter. Device can be programmed for length of wire to be measured and for the number of pieces to be cut. Once program is set, start button is pressed, wire is inserted into encoder and pulled through. Device speaks out the length of the wire being measured with a "STOP" command at end point. Operator interrogates system for status of both footage and number of pieces remaining to be measured.

(Information provided by Ricardo Cerna, Rehabilitation Engineering Specialist, Wisconsin Division of Vocational Rehabilitation, and Don Warren.)

MOBILITY

Aud-A-Vator 486

Auditory Maps 488

Light Probe 490

Memco Audible Light Meter 492

Mowat Sensor 494

Sonicguide 496

Soniguide 498

AUD-A-VATOR

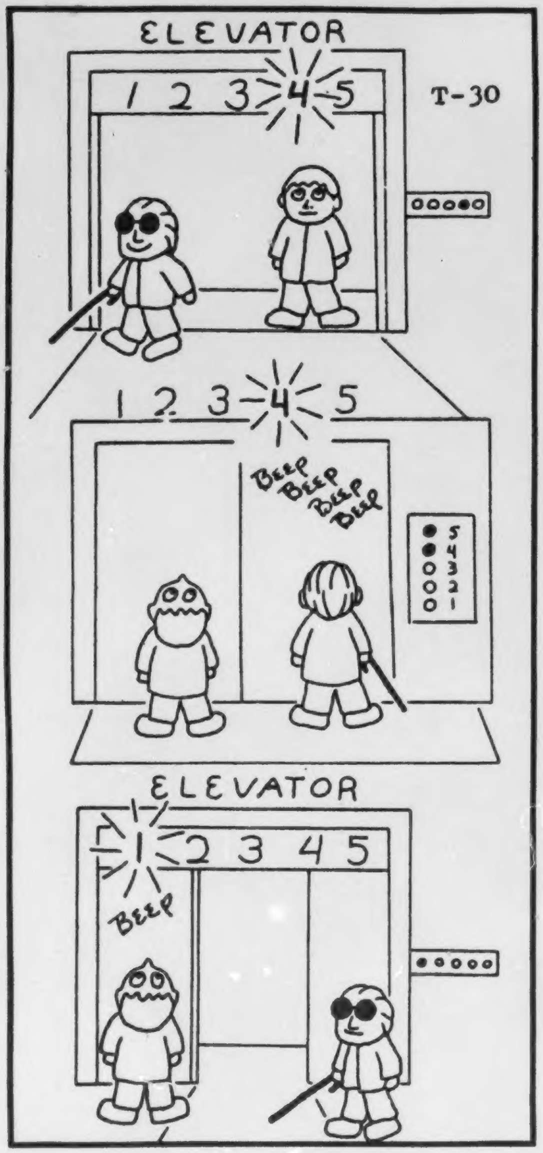

ELEVATOR
1 2 3 4 5
T-30
1 2 3 4 5
BEEP
BEEP
BEEP
BEEP
5
4
3
2
1
ELEVATOR
1 2 3 4 5
BEEP

Illustration courtesy of
Science for the Blind
Products

AUD-A-VATOR

DEVELOPER

CONTACT PERSON

Tom Benham
Science for the Blind
Products
Box 385
Wayne, PA 19087
(215) 687-3731

WHERE IT IS USED

With elevators

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Science for the Blind Products
Box 385
Wayne, PA 19087

Price estimated between $100 and $200 per car plus installation.

HOW IT WORKS

The Aud-A-Vator is an elevator floor signaling device that indicates the floor at which the elevator stops by emitting a series of beeps. Installed easily on the roof of the elevator car by regular service personnel. It is ideal for buildings with 10 floors or less and useful up to 20 floors.

(Information based on Science for the Blind literature.)

AUDITORY MAPS

Photograph not available

AUDITORY MAPS

DEVELOPER

Bruce B. Blasch, Ph.D.
Karen M. Todd
Waisman Center
Mobility Training Project
1500 Highland Ave.
Madison, WI 53706
(608) 263-5916

CONTACT PERSON

McBurney Resource Center
75 Bascom Hall
Madison, WI 53706
(608) 263-2741

WHERE IT IS USED

Orientation to specific travel areas or within buildings

PROBLEM(S) IT OVERCOMES

disorientation of a visually impaired traveller in an unfamiliar environment

FIELD TESTED

yes

University of Wisconsin-Madison

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

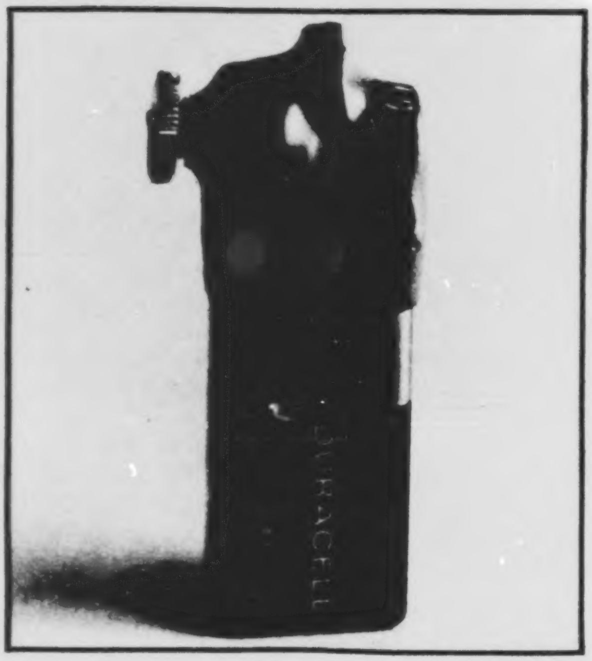
no

HOW IT WORKS

The University of Wisconsin-Madison Mobility Training Project's auditory maps, (recorded on cassette tapes), provide visually impaired persons travelling on campus, who are fully trained in the use of the cane or a guide dog, with a verbal description with which to orient themselves to a specific travel area, or with step-by-step instructions which will guide them to specific buildings or to particular rooms within campus buildings. The maps emphasize cues, such as cardinal directions, landmarks, texture changes in surfaces, inclines, declines, distance judgments, and environmental sounds, used by visually impaired persons who travel independently. Reference systems used in constructing the maps consist of ego-centric, topo-centric, cartographic and or polar-centric. The maps are recorded on cassette tapes for portability. Maps to any travel area or buildings can be made using the orientation cues described above.

(Information provided by Bruce Blasch and Karen M. Todd, University of Wisconsin-Madison.)

LIGHT PROBE



Photograph courtesy of
American Foundation for
the Blind

LIGHT PROBE

DEVELOPER

The Smith-Kettlewell
Institute Rehabilitation
Engineering Center
2232 Webster Street
San Francisco, CA 94115

CONTACT PERSON

Alex H. Townsend
American Foundation for
the Blind
15 West 16th Street
New York, NY 10011
(212) 620-2169

WHERE IT IS USED

Wherever there is a light source

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

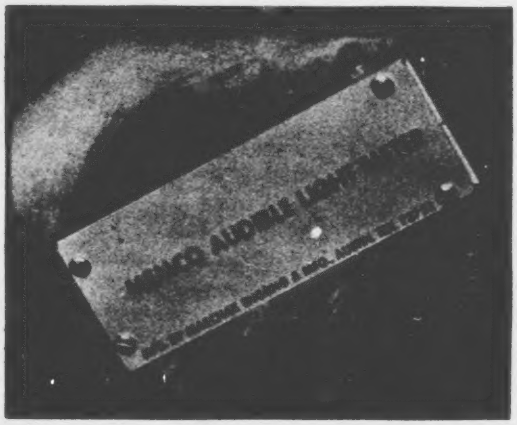
Manufacturer: San Francisco Lighthouse
for the Blind
745 Buchanan Street
San Francisco, CA 94102
$40.00
Distributor: American Foundation for the Blind $50.00

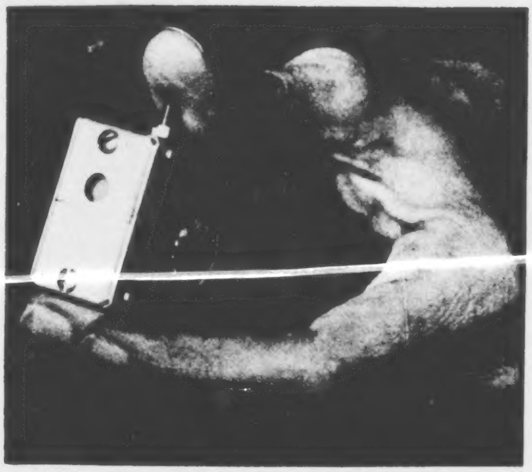
HOW IT WORKS

This small, lightweight probe has different audible pitches to distinguish the reflectivity of a surface. It can detect the presence of print and light and can therefore be used in occupations such as typing and switchboard work, as well as in detecting the on and off position of light. Adjustable sensitivity control allows for more flexible and reliable use.

(Information based on American Foundation for the Blind literature.)

MEMCO AUDIBLE LIGHT METER


MEMCO AUDIBLE LIGHT METER



Photographs courtesy of
Applied Rehabilitation Systems
Inc.

MEMCO AUDIBLE LIGHT METER

DEVELOPER

Marchak Engineering &
Manufacturing Co.
6609 North Lamar
Austin, TX 78752

CONTACT PERSON

Applied Rehabilitation
Systems Inc.
3902 Idlewild
Austin, TX 78731
(512) 459-8935

WHERE IT IS USED

Detecting light sources

PROBLEM(S) IT OVERCOMES

difficulty experienced by blind persons when monitoring their environments

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Applied Rehabilitation Systems Inc.
3902 Idlewild
Austin, TX 78731

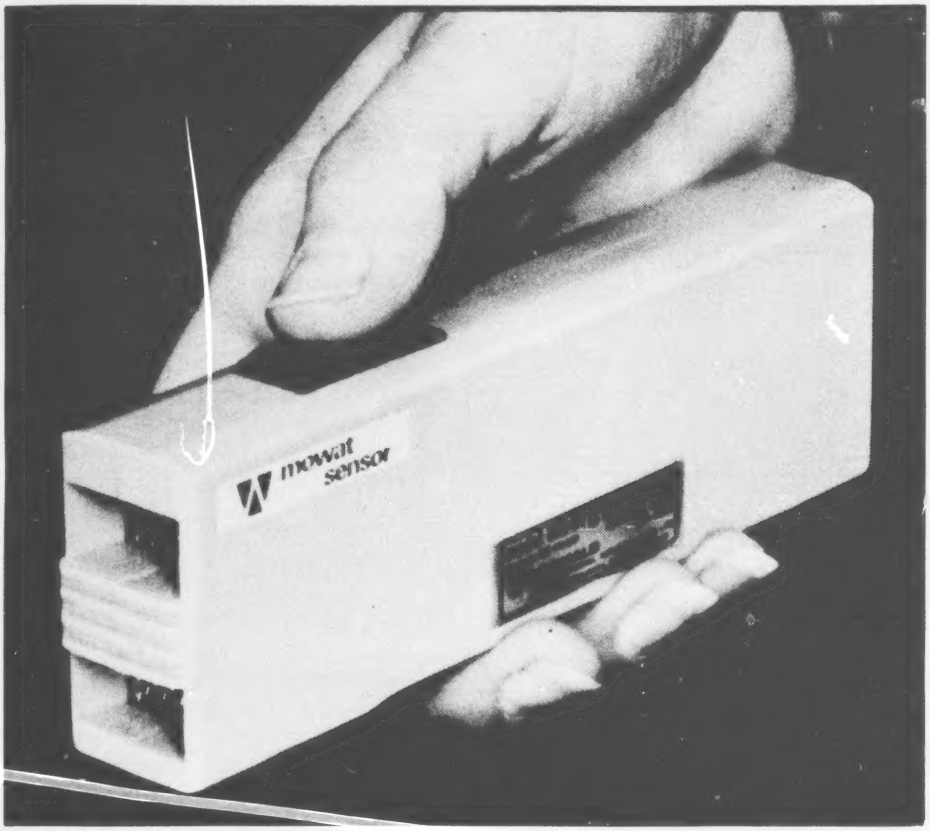
$69.50 plus tax

HOW IT WORKS

Developed as a spinoff from NASA Aerospace Research and Development, the Audible Light Meter is a portable light detection system which can let the blind person know when electric lights are on or off, when indicator lights on automatic appliances are on, when stock supplies are not on display correctly, when commercial coffee pots need to be refilled, when it is daylight or dark outside, and when colors of items are different. It can assist with mobility. Doorways, room parameters, halls, and windows can be detected from a distance. The small, hand-held device activates an accoustical signal of varying frequencies when pointing toward a source emitting or reflecting light. The tones vary with the amount of light reflected (as in colors of clothing) or emitted on the light detection system.

(Information based on company literature.)

MOWAT SENSOR


mowat
sensor

Photograph courtesy of
Sensory Aids Corporation

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MOWAT SENSOR

DEVELOPER

Wormald International
Sensory Aids, Ltd.
Christchurch, New Zealand
and
Sensory Aids Corporation
Bensenville, IL 60106

CONTACT PERSON

B. Blasch
Sensory Aids Corporation
205 W. Grand
Bensenville, IL 60106
(312) 766-3935

WHERE IT IS USED

Travel

PROBLEM(S) IT OVERCOMES

visual impairment; hearing impairment

FIELD TESTED

yes

U.S.A., Australia, New Zealand, England

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Wormald International Sensory Aids
P.O. Box 10014
Christchurch, New Zealand
$435.00

See appendix for availability in Australia and Europe, all other countries use above address.

HOW IT WORKS

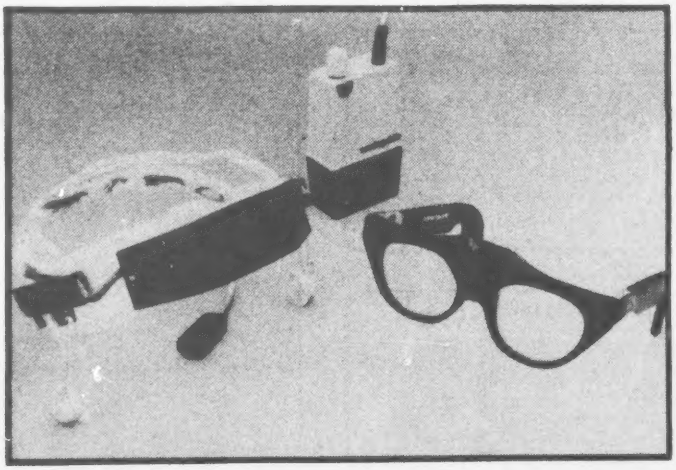
This is a hand-held unit which uses high frequency sound to detect objects within a narrow area. When an object is detected, the entire unit vibrates. It is used in conjunction with a long cane or guide dog.

The user can set the sensor to respond to objects less than one meter away or up to four meters away. The range settings are controlled by a sliding thumb switch on top of the case. To determine direction of an object, the user scans the area as a sighted person scans with a flashlight.

The unit, measuring 150mm x 50mm x 25 mm, operates on a rechargeable battery.

(Information based on Wormald International Sensory Aids, Ltd. brochure.)

SONICGUIDE



Photographs courtesy of
Sensory Aids Corporation

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SONICGUIDE

DEVELOPER

Wormald International
Sensory Aids, Ltd.
Christchurch, New Zealand
and
Sensory Aids Corporation
Bensenville, IL 60106

CONTACT PERSON

B. Blasch
Sensory Aids Corporation
205 W. Grand
Suite 110
Bensenville, IL 60106
(312) 766-3935

WHERE IT IS USED

Travel

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

U.S.A., Australia, New Zealand, England

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Sensory Aids Corporation
205 W. Grand
Suite 110
Bensenville, IL 60106

$2195.00

See appendix for availability outside U.S.A. and Canada.

HOW IT WORKS

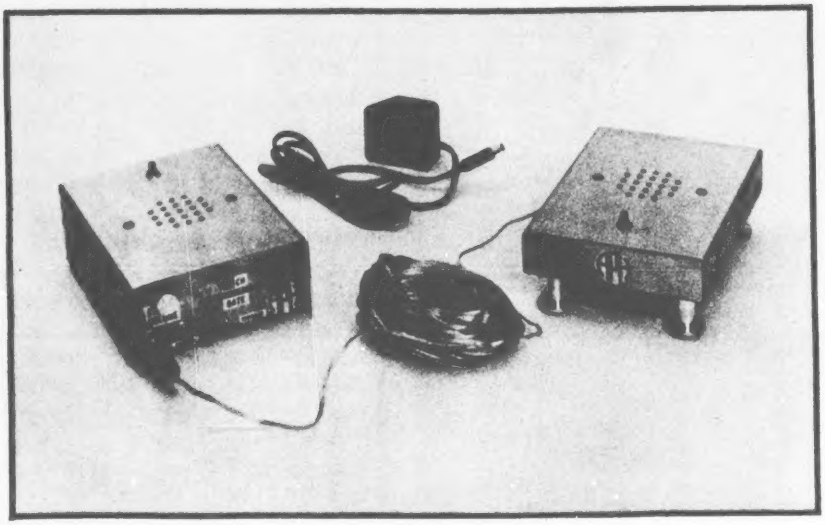
Users can judge direction, distance and surface qualities of objects in their travel path. Sensors are built into a spectacle frame so that the user develops similar head movements and posture to a sighted person.

In the center of the spectacle frame is a transmitter which radiates ultrasound in front of the user. The ultrasound hits an obstruction, is reflected to the aid, converted into electrical signals by the receiving microphones and then into audible sounds by the earphones in the temples of the frame. Small tubes direct the sound to the ear.

Sounds will be louder in the ear nearest the object. The pitch will vary with the distance of the object. A small control box which can be carried in a pocket, at the belt or on a shoulder strap, contains the aid's electronics.

(Information based on Wormald International Sensory Aids, Ltd. brochure.)

SONIGUIDE



478

Photograph courtesy of
American Printing House
for the Blind

SONIGUIDE

DEVELOPER

Manufactured by:
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206
(502) 895-2405

WHERE IT IS USED

Assembly
Improve mobility and independence

PROBLEM(S) IT OVERCOMES

visual impairment; multiple handicaps

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

yes

FOR SALE

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

$142.50

HOW IT WORKS

This device consists of a master unit containing all the electronics, speaker and power, and the remote unit containing only a speaker and the cord. On/off volume control knob plus frequency and pulse-rate controls are located on the master unit. Each unit bears a "response switch" which makes the Soniguide different from other sound devices. Emphasis can be placed on tracking, localizing and responding to sound, balance and posture, arm positioning for independent travel, or cane travel. Because of this "response switch", repetition in learning experiences needed by the multi-handicapped is built into the whole system. Thus it could be helpful in repetitious assembly-line tasks where constant verbal prompts are not possible.

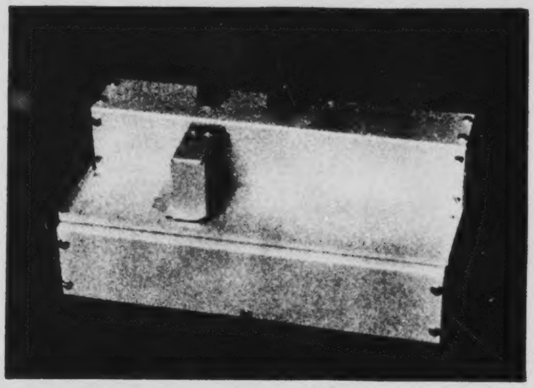
(Information based on American Printing House for the Blind literature.)

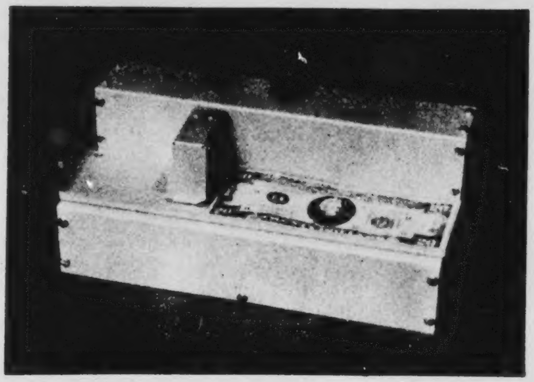
MONEY EXCHANGE

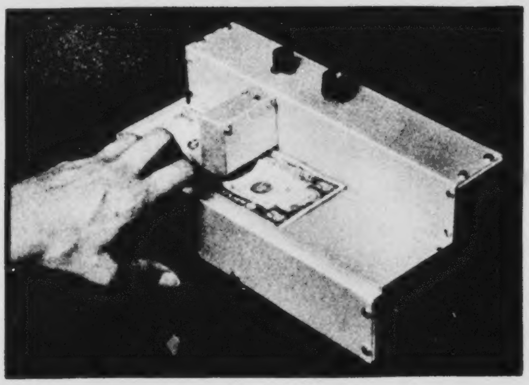
Paper Money Identifier 502

WWRC Vacuum Wand 504

PAPER MONEY IDENTIFIER







Photographs courtesy of
Applied Rehabilitation Systems
Inc.

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PAPER MONEY IDENTIFIER

DEVELOPER

Marchak Engineering &
Manufacturing Co.
6609 North Lamar
Austin, TX 78752

CONTACT PERSON

Applied Rehabilitation
Systems Inc.
3902 Idlewild
Austin, TX 78731
(512) 459-8935

WHERE IT IS USED

Business
Marketing
Office
Sales

PROBLEM(S) IT OVERCOMES

inability of a blind person to easily distinguish denominations of paper money

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Applied Rehabilitation Systems Inc.
3902 Idlewild
Austin, TX 78731

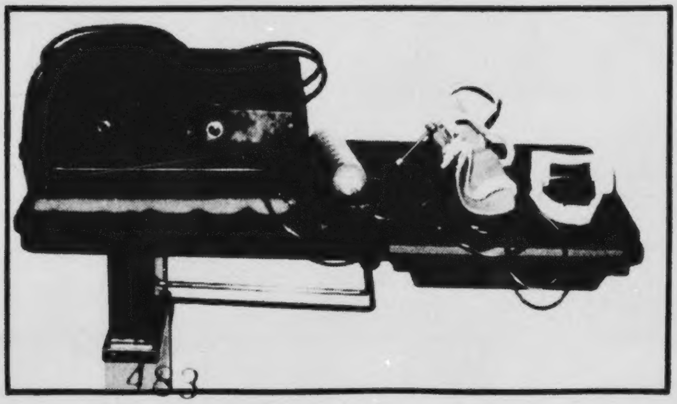
$189.50 plus tax

HOW IT WORKS

Developed as a spinoff from NASA's Aerospace Research and development efforts, the Paper Money Identifier (PMI) is an instrument for distinguishing the various denominations of paper money from each other. The back side of each bill has a characteristic sound pattern corresponding to the shades of color on the bill. Lighter colors emit a distinguishing higher pitched sound than do darker colors.
The instrument incorporates a light that shines on a photoelectric cell. When the bill is passed under this beam, various amounts of light are reflected onto the photocell. These amounts correspond to the configurations printed on the bill. The light variations change the voltage which causes changes on the sounds emitted as the bill is moved through the PMI.

(Information based on company literature.)

WWRC VACUUM WAND



Photographs courtesy of
David F. Law, Jr.

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WWRC VACUUM WAND

DEVELOPER

Woodrow Wilson Rehab. Ctr.
Rehabilitation Engin. Dept.
Fishersville, VA 22939
(703) 885-9724

CONTACT PERSON

David F. Law, Jr.
Woodrow Wilson Rehab. Ctr.
Rehabilitation Engin. Dept.
Fishersville, VA 22939
(703) 885-9724

WHERE IT IS USED

Clerical
Sales
Service

PROBLEM(S) IT OVERCOMES

inability to handle individual pieces of paper money

HOW IT WORKS

A compact unit supplies vacuum to a small suction cup on a cock-up splint. This provides relatively strong prehensile force, and can be used easily by a quadriplegic person to manipulate currency. The vacuum is controlled either by sip and puff or by a compression bulb under the arm pit. By using a pneumatic control, no electrical components ever contact the individual.

(Information provided by David F. Law, Jr.)

FIELD TESTED

yes

Woodrow Wilson Rehabilitation Center

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

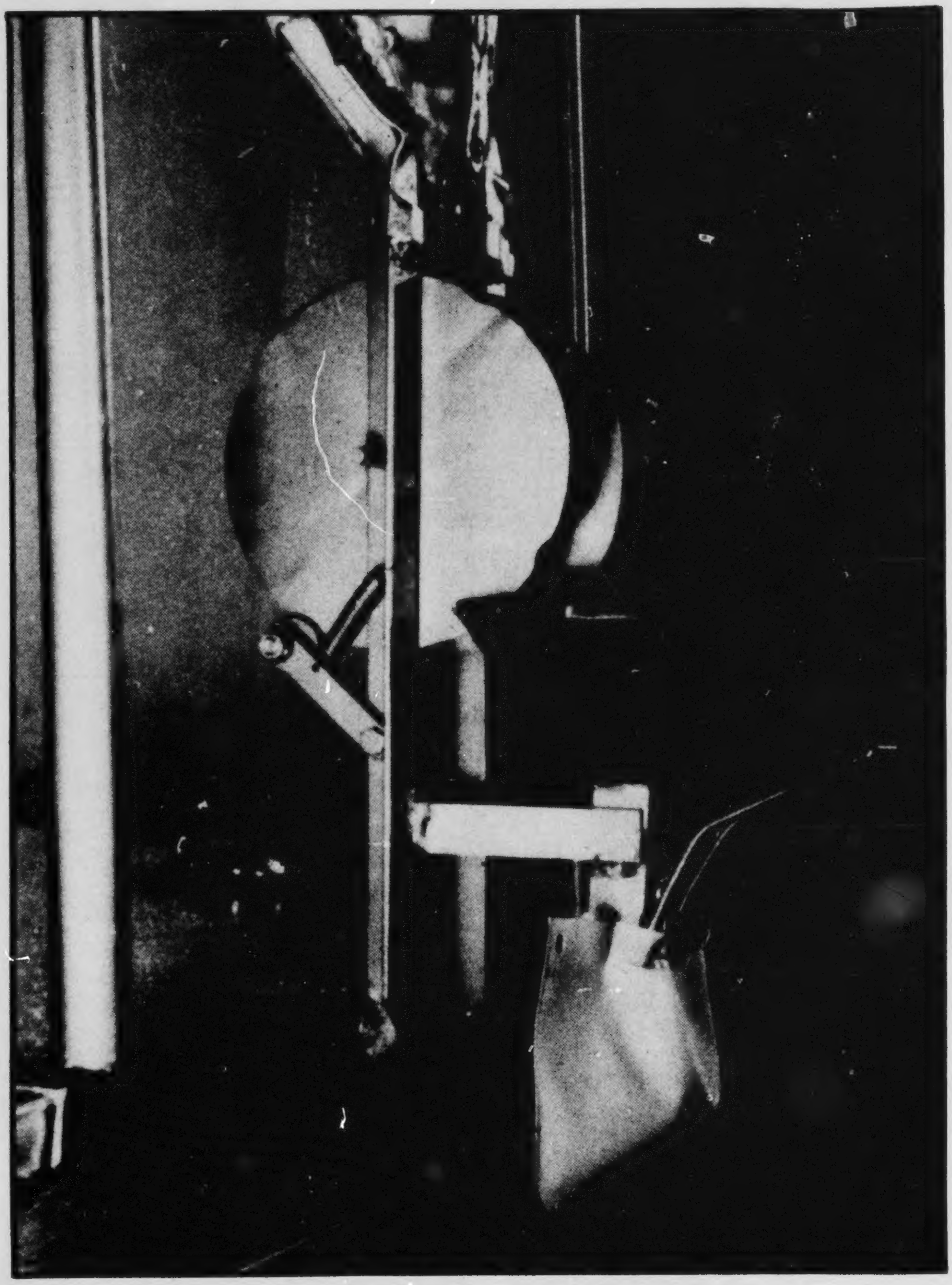
no

484

PACKAGING

Accurate Packaging of Dry Bulk Material 508
Applying Labels to Bottles 510
Carrousel Type Packaging Conveyor . . 512
Coiling Flexible Plastic Tubing . . . 514
Coiling Hose for Blister Packaging . 516
"Counting Aids" 518
Fixture to Package Small Items . . . 520
The Modification of a Handheld Heat Sealer 522
Multiple Parts Packaging Station . . 524
Net Weight Packaging of Small Items 526
Packaging for Uniform Appearance . . 528
Packaging Small Quantities of Metal Parts 530
Shaker Table for Bulk Product Packaging 532
Shutter Packager 534

ACCURATE PACKAGING OF DRY BULK MATERIAL



Photograph courtesy of California Department of Rehabilitation

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ACCURATE PACKAGING OF DRY BULK MATERIAL

DEVELOPER

Charles Eckles
Independent Contract
Consultant
(213) 360-4180

CONTACT PERSON

California Department of
Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

HOW IT WORKS

This piece of equipment is designed to measure out and bag a fixed volume of sand. The sand pours from a hopper into a wheel with four sections, each section holding a fixed volume of sand. When one section is filled, the hopper stops pouring. The wheel is then rotated by hand into the funnel, from which the sand is poured into a bag placed below the funnel. As the wheel rotates, sand flows into the next section and the process repeats itself. A wire extension from the bag is an expander to keep the bag open to reduce the possibility of spill.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

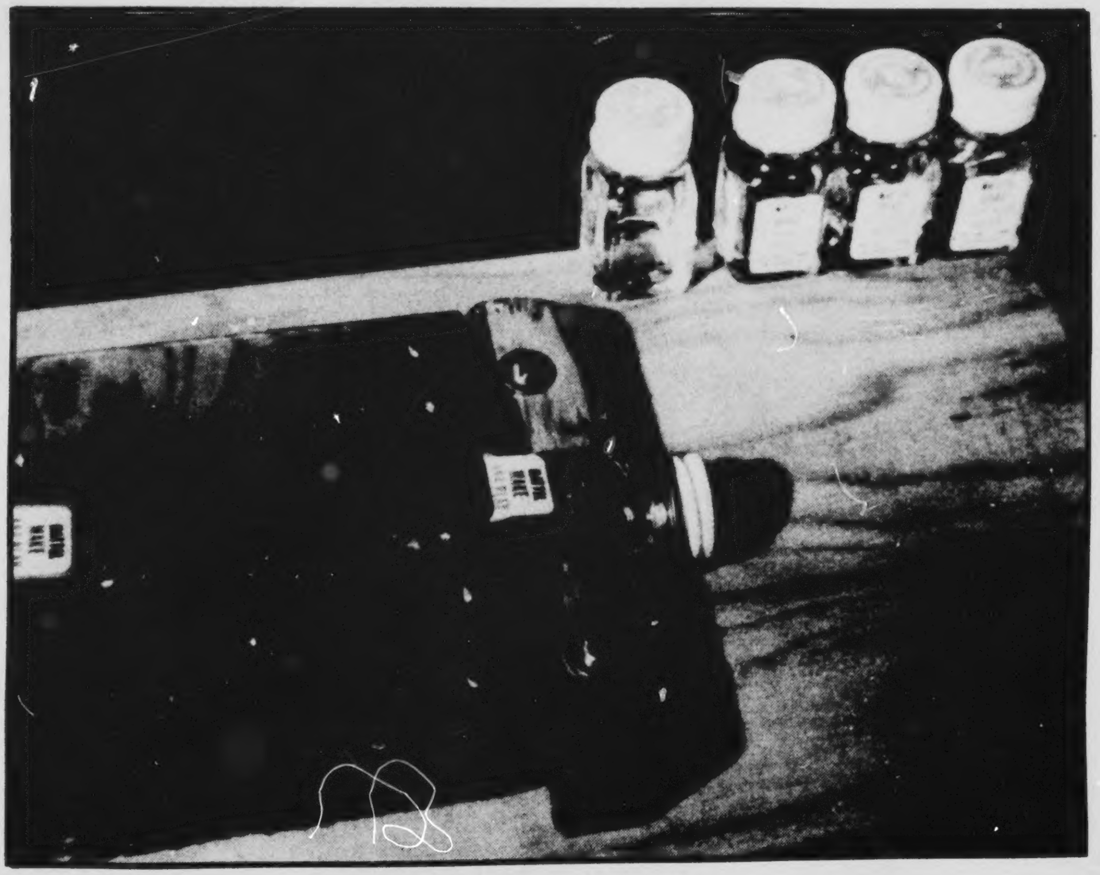
WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

APPLYING LABELS TO BOTTLES



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Photograph courtesy of California Department of Rehabilitation

APPLYING LABELS TO BOTTLES

DEVELOPER

Charles Eckles
Independent Contract Consultant
(213) 360-4180

CONTACT PERSON

California Department of Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Applying labels

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

HOW IT WORKS

This simple positioning jig aids in applying labels exactly where they belong on small bottles. The roll of lables is held in position directly in line with a slot that holds the bottle. The labels are threaded through the slot and come out in exactly the right place for application to the bottle. Improved quality and a highly increased rate of production results from use of this jig.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

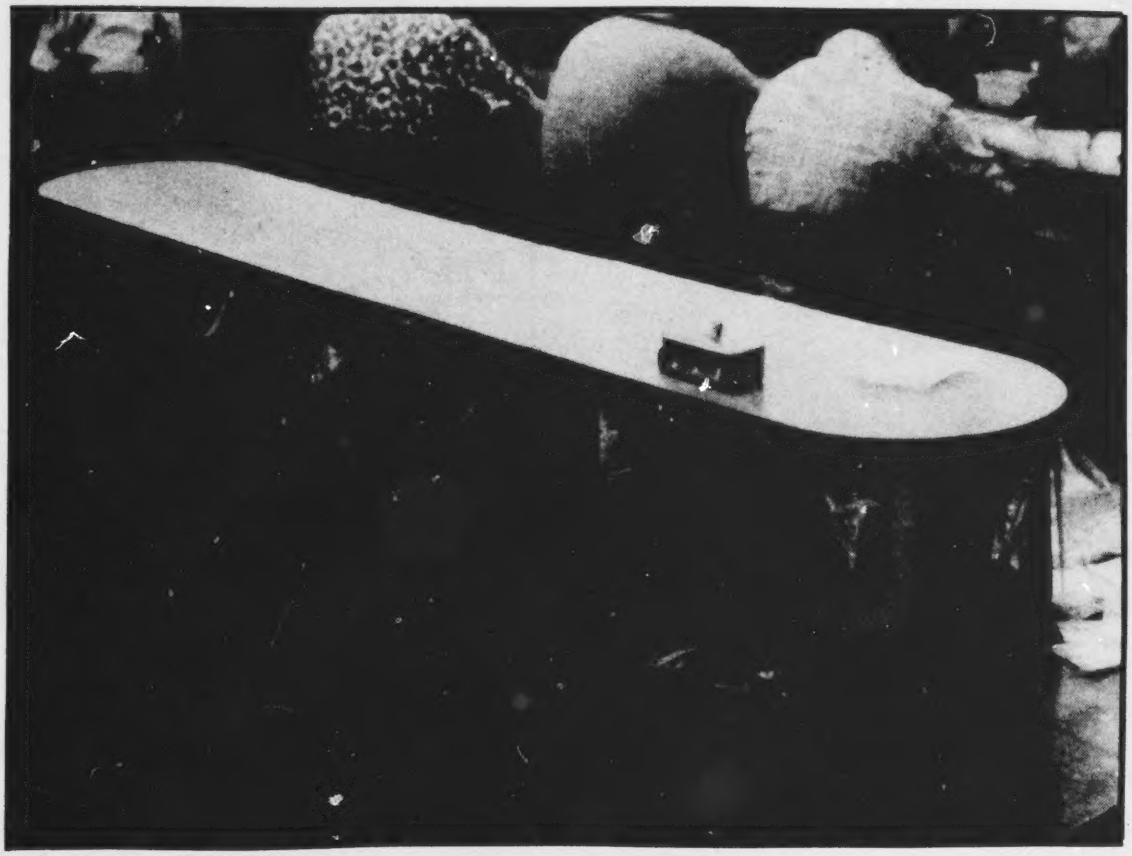
WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

CARROUSEL TYPE PACKAGING CONVEYOR



Photograph courtesy of California Department of Rehabilitation

CARROUSEL TYPE PACKAGING CONVEYOR

DEVELOPER

Charles Eckles
Independent Contract
Consultant
(213) 360-4180

CONTACT PERSON

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830 "K" Street Mall
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(916) 322-8500

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

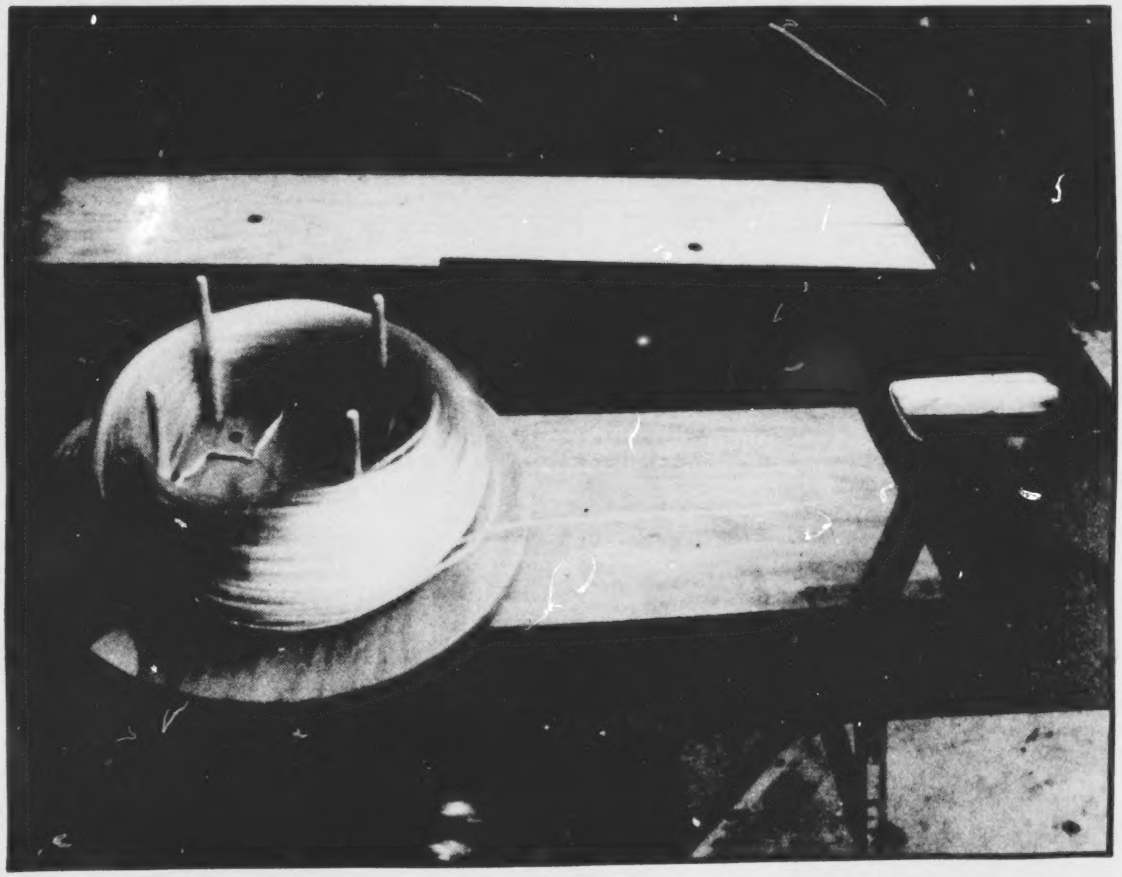
May be made at a minimal cost.

HOW IT WORKS

This is a unique type of packaging conveyor suitable for gathering small light weight parts. Suspended clipboards hang from a motor driven belt and rotate around the work table. At the first work station, plastic bags are clipped to the board. Each successive worker then adds his or her particular item to the bag and the last worker removes the bag and seals it. One advantage to this carrousel type conveyor is that the motor speed (RPM) is controllable by regulating the voltage and therefore adaptable to the work pace of those using it. One person may be able to place only one item in the bag, while another might be able to handle three or four.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

COILING FLEXIBLE PLASTIC TUBING



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Photograph courtesy of California Department of Rehabilitation

COILING FLEXIBLE PLASTIC TUBING

DEVELOPER

Charles Eckles
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Consultant
(213) 360-4180

CONTACT PERSON

California Department of
Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

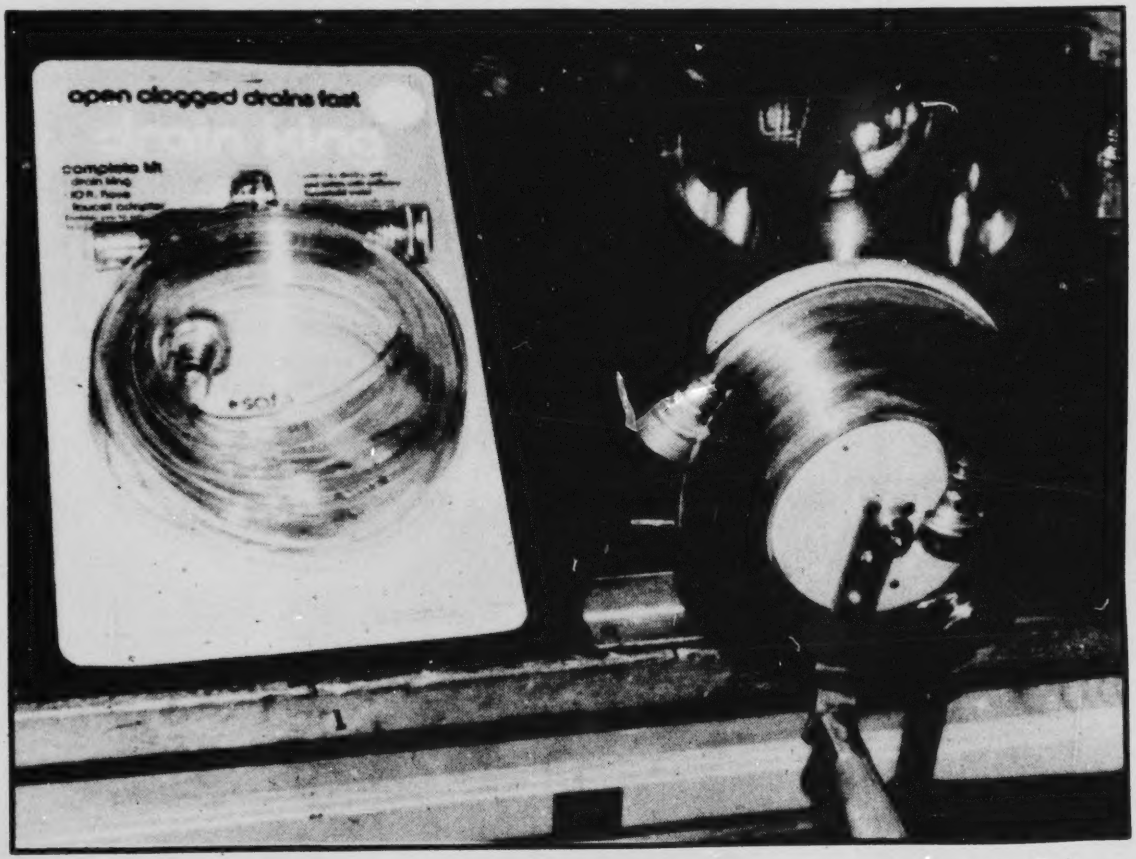
May be made at a minimal cost.

HOW IT WORKS

This device simplifies the job of wrapping small diameter plastic tubing onto a form for packaging. A hand-cranked grinder is converted into a winding machine by removing the grinding wheel and adapting the shaft to hold a six-inch winding hank. The grinder is geared so that one and one-half turns of the handle winds an 18-foot length of tubing onto the hank form which can then be slid off of its holder pegs ready for packaging.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

COILING HOSE FOR BLISTER PACKAGING


open clogged drains fast
complete kit

Photograph courtesy of California Department of Rehabilitation

COILING HOSE FOR BLISTER PACKAGING

DEVELOPER

Charles Eckles
Independent Contract
Consultant
(213) 360-4180

CONTACT PERSON

California Department of
Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

This device simplifies the coiling of plastic hose to a required size to fit a blister pack. A winding reel, that is cranked by hand, is used: one flange of the wheel contains a notch to hold the end of the hose in position while coiling the strand around the core. With the uniform coils of hose, blister packaging becomes a simple process.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

"COUNTING AIDS"

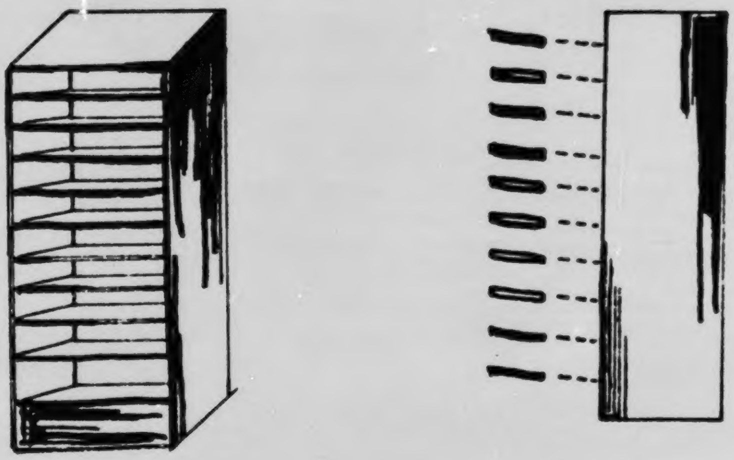


FIGURE A

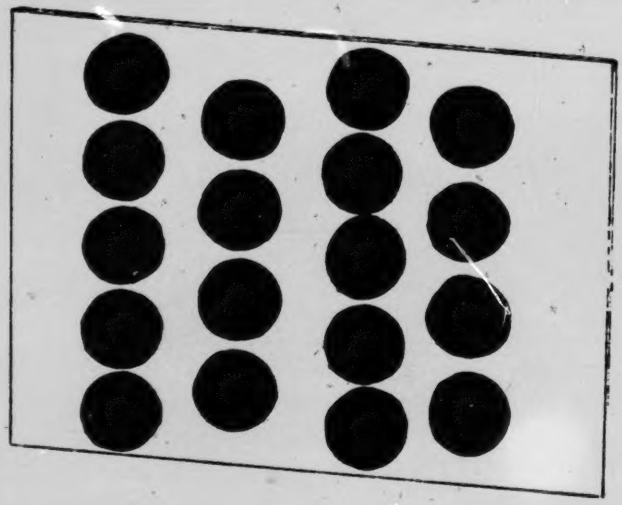


FIGURE B

Diagrams courtesy of
Susanne Wynkoop

"COUNTING AIDS"

DEVELOPER

Dieter A. Papke
555 Fern Street
Westwood, NJ 07675
(201) 664-3173

CONTACT PERSON

Susanne Wynkoop
Associated Craftsmen/
Easter Seals
15 Emerald Street
Hackensack, NJ 07601
(201) 342-5739

WHERE IT IS USED

Benchwork
Packaging

PROBLEM(S) IT OVERCOMES

difficulty in packaging materials correctly when the packager has difficulty counting accurately

FIELD TESTED

yes

Associated Craftsmen/Easter Seals

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

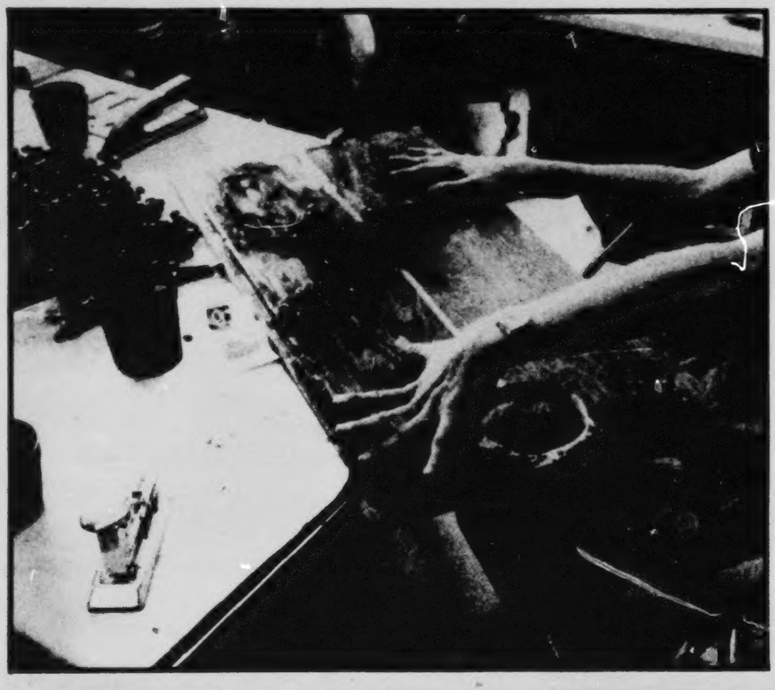
May be made at a minimal cost.

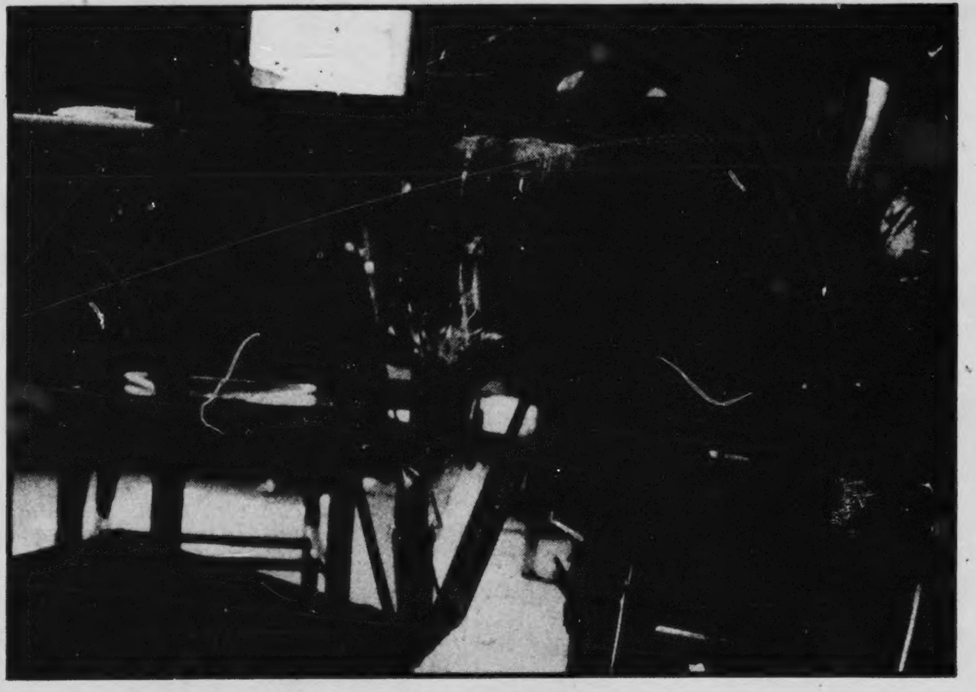
HOW IT WORKS

Since 15 to 20% of our workshop population cannot count, we developed a non-numerical system. Cartons arrived at our plant in cases of 200 units. We were to unpack the cartons, bundle them into sets of 10 units, and repack them. In order for "non-counting" workers to complete this task I constructed cardboard racks of ten shelves. They were instructed to place one carton on each shelf and when the rack was full to remove the cartons and bundle them with a rubber band. A rack can be constructed in about 15 minutes. Cardboard boxes make excellent frames. You tape, staple, or glue flat cardboard sheets into the frame to create the number of shelves you desire (see Fig. "A"). Figure "B" illustrates the type of jig we used for dividing cases of jar caps into sets of eighteen units. Here, using a stencil with spray paint, I painted 18 circles (with circumference equal to that of caps) onto a piece of white cardboard. The disabled worker was instructed to place one cap on each circle of the board. When all the circles were covered they placed the 18 caps into a plastic bag which was then sealed. Even our numerically able workers used this counting jig because it allowed them to converse while performing a task which would ordinarily require silent counting. This in turn lowered our error rate and the amount of downtime due to worker socialization. Individual work speed and quality improved with the incorporation of this jig.

(Information provided by Susanne Wynkoop.)

FIXTURE TO PACKAGE SMALL ITEMS





Photographs courtesy of
Mark Stephenson

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FIXTURE TO PACKAGE SMALL ITEMS

DEVELOPER

Mark Stephenson
Occupational Services,
Inc.
17 Redwood St.
Chambersburg, PA 17201

CONTACT PERSON

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

difficulty experienced by some persons with cerebral palsy in reading, grasping, placing, or holding items

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

no

HOW IT WORKS

One person usually performs this job. In this case the job was divided. The board was designed to reduce the movements of reaching, grasping, placing and holding to reaching and pushing item into funnel. The person at the other end of the operations inserts instruction sheet into the poly bag, places poly bag on funnel, retrieves it and staples it shut.

Materials: 4" X 18" X 1/4" Plexiglas, 18" X 36" X 1/4" AC grade plywood, funnel from 2 litre Pepsi bottle, acrylic latex caulk, paneling nails 18-1/2" woodscrews 18-washers, polyurethane varnish.

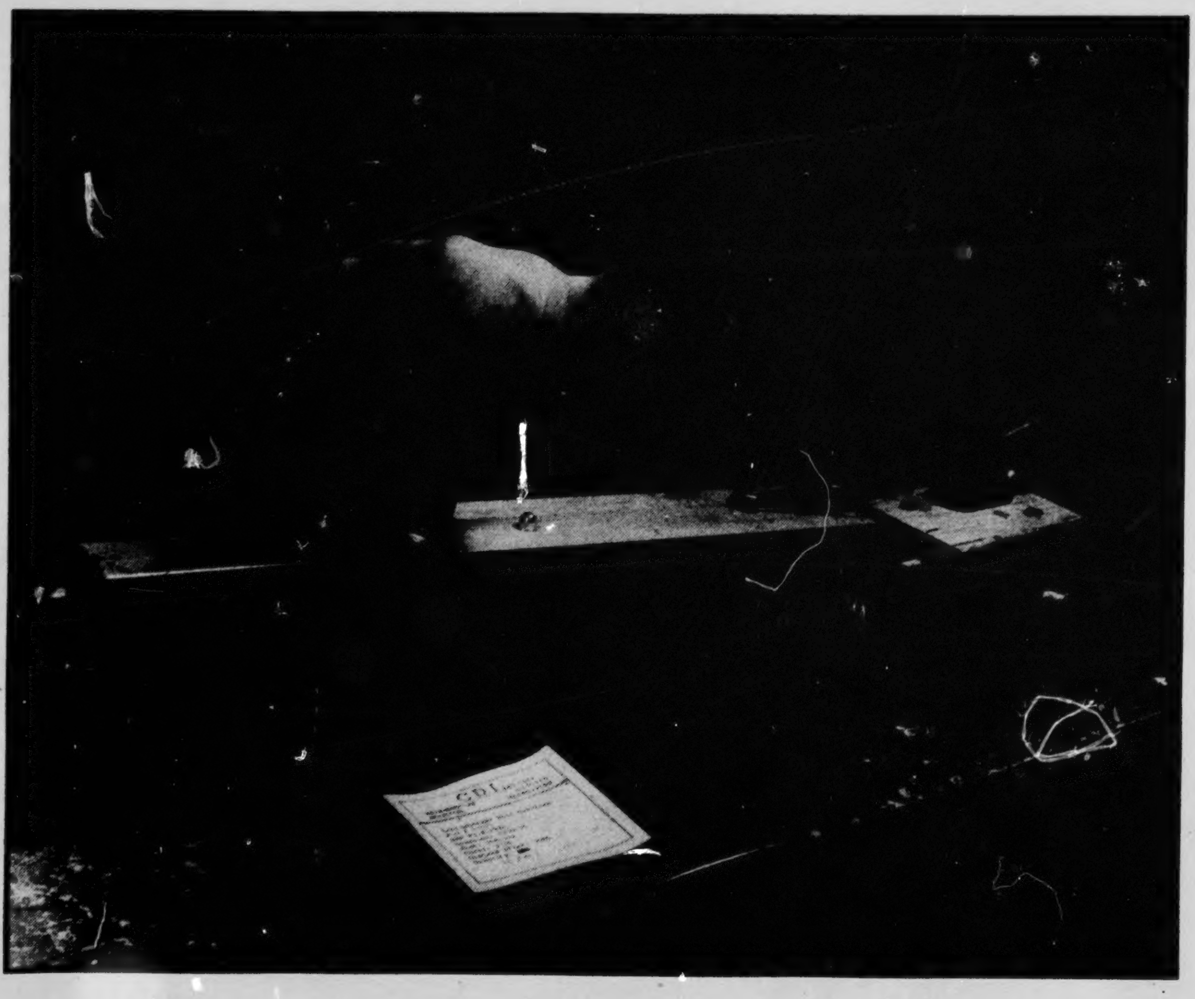
Equipment: Heat strip for bending plastic (acquired from Plastic Distributor/Manufacturer in area $9.00), hand drill, sabre saw.

Instructions: Cut hole in plywood according to size of funnel. Nail funnel to board, line union with acrylic latex caulk. Varnish when caulk is dry.

Length of Plexiglas depends upon: length of the funnel and length of poly bag. Overall length of Plexiglas should include distance from fastening to board, and distance from Y in Plexiglas to end of funnel to allow for the materials to leave the funnel completely and the poly bag to remain on the funnel with packaged items.

(Information provided by Mark Stephenson.)

THE MODIFICATION OF A HANDHELD HEAT SEALER



Photograph courtesy of Albert E. Swarts, P.E.

THE MODIFICATION OF A HANDHELD HEAT SEALER

DEVELOPER

Albert E. Swarts, P.E.
Richard L. Biddy, Dir.
Vocational Industrial
Center - (Houston)
Donald R. Smith, PH.D.
Texas A & M University -
(College Station)

CONTACT PERSON

Albert E. Swarts, P.E.
Vocational Industrial Ctr.
Institute for Rehabilitation and Research
2809 Main Street
Houston, TX 77002
(713) 797-1440

WHERE IT IS USED

Assembly
Benchwork

PROBLEM(S) IT OVERCOMES

use of only one hand; lower extremity weakness

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

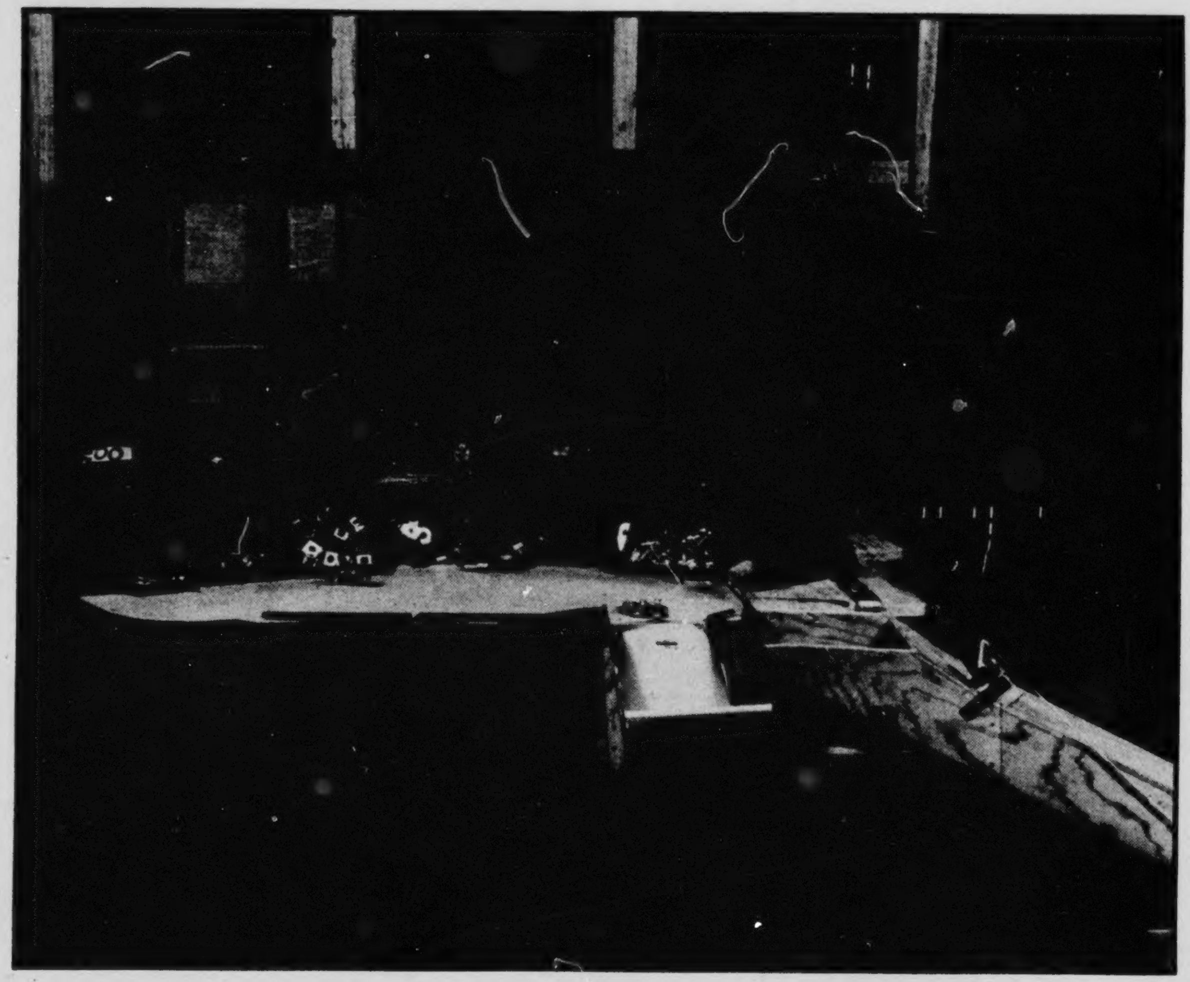
May be made at a minimal cost.

HOW IT WORKS

A hinge is attached to a hand heat sealer so that it can be swung down on a definite line when clamped to a table top. This is accomplished by mounting an extra plate to the back of the sealer to provide the extension needed to mount the hinge.

(Information based on Examples of Jig and Fixture Design as Applied to the Severely Disabled Functioning in a Sheltered Workshop, Biddy, Smith and Swarts.)

MULTIPLE PARTS PACKAGING STATION



502

Photograph courtesy of Albert
E. Swarts, P.E.

MULTIPLE PARTS PACKAGING STATION

DEVELOPER

Albert E. Swarts, P.E.
Richard L. Biddy, Dir.
Vocational Industrial
Center - (Houston)
Donald R. Smith, Ph.D.
Texas A & M University -
(College Station)

CONTACT PERSON

Albert E. Swarts, P.E.
Vocational Industrial Ctr.
Institute for Rehabilitation and Research
2809 Main Street
Houston, TX 77002
(713) 797-1440

WHERE IT IS USED

Assembly
Benchwork

PROBLEM(S) IT OVERCOMES

use of only one hand; lower extremity weakness; reach limitations

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

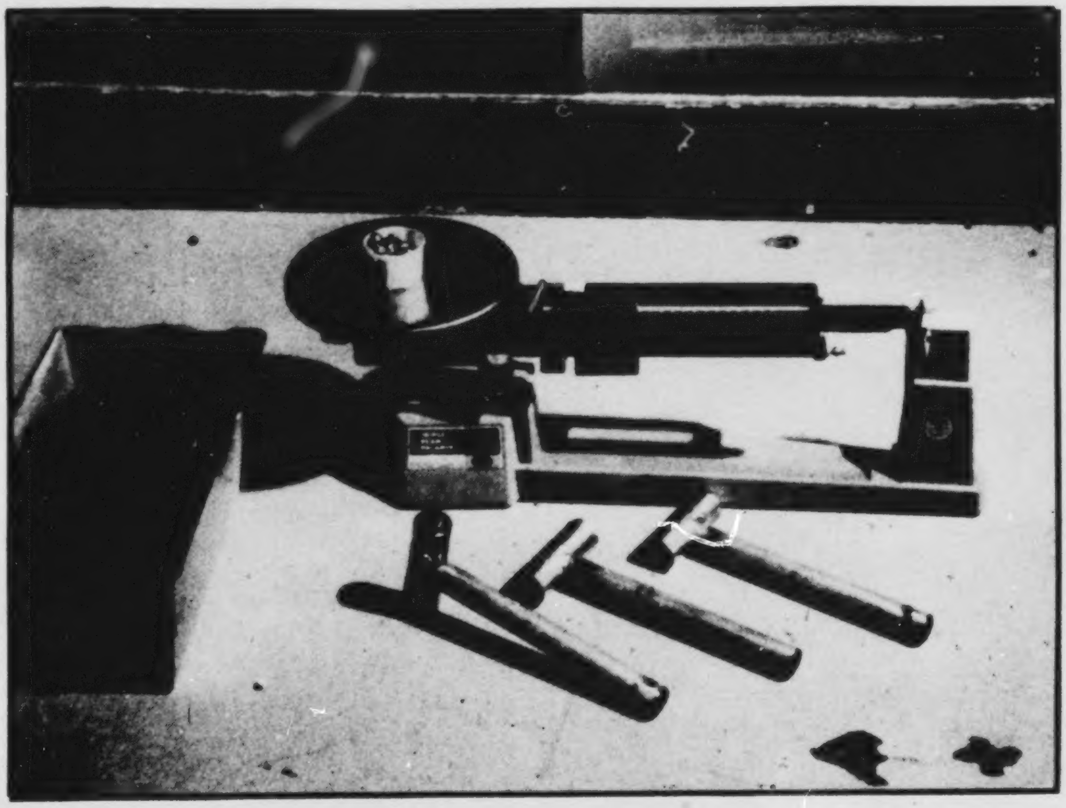
May be made at a minimal cost.

HOW IT WORKS

A system of gravity feed bins was designed to store a considerable volume of parts while being constantly within reach of the worker. The smooth area in front of the user permits easy counting of the parts. The packages for the parts are held in a bind under the chute used for loading them. The chute holds the package open while it is being loaded. After the package is loaded and stapled closed, it is dropped into a delivery chute which carries it to the shipping container. A grate on the chute is equipped with a counter to record the number for a constant quantity in each container. This simplifies customer billing and piece rate payment.

(Information based on Examples of Jig and Fixture Design as Applied to the Severely Disabled Functioning in a Sheltered Workshop, Biddy, Smith and Swarts.)

NET WEIGHT PACKAGING OF SMALL ITEMS



Photograph courtesy of California Department of Rehabilitation

NET WEIGHT PACKAGING OF SMALL ITEMS

DEVELOPER

Charles Eckles
Independent Contract Consultant
(213) 360-4180

CONTACT PERSON

California Department of Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

HOW IT WORKS

This jig simplifies the job of packaging small pellets in individual envelopes. Using a bulk measuring scoop to pre-establish approximate net weights is a great time saver in the packaging of small items. The pellets are scooped up by the dipper and emptied into a paper cup placed on a balance-type scale. The exact net weight can then be adjusted by adding or removing the necessary amount of material from the cup.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

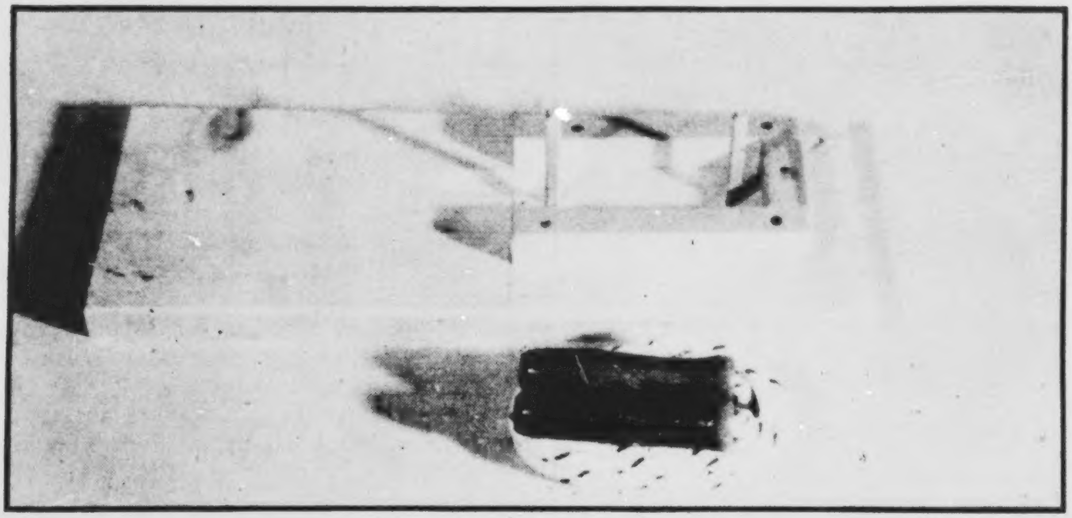
WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

PACKAGING FOR UNIFORM APPEARANCE



Photograph courtesy of California Department of Rehabilitation

PACKAGING FOR UNIFORM APPEARANCE

DEVELOPER

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Independent Contract Consultant
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CONTACT PERSON

California Department of Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

See: HOW IT WORKS

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

This jig simplifies the difficult task of preparing a jump rope for packaging. A simple wooden jig and a frame with 2 dowels is all that is needed to hold the rope in position. The jump rope handles are placed on either side of the dowels and the rope is wrapped around them. The coiled rope can be lifted out exactly as required to fit into a packaging wrapper.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

PACKAGING SMALL QUANTITIES OF METAL PARTS

Photograph courtesy of California Department of Rehabilitation

PACKAGING SMALL QUANTITIES OF METAL PARTS

DEVELOPER

Charles Eckles
Independent Contr[illegible]
Consultant
(213) 360-4180

CONTACT PERSON

California Department of
Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

difficulty picking up nails by hand from a bulk container

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

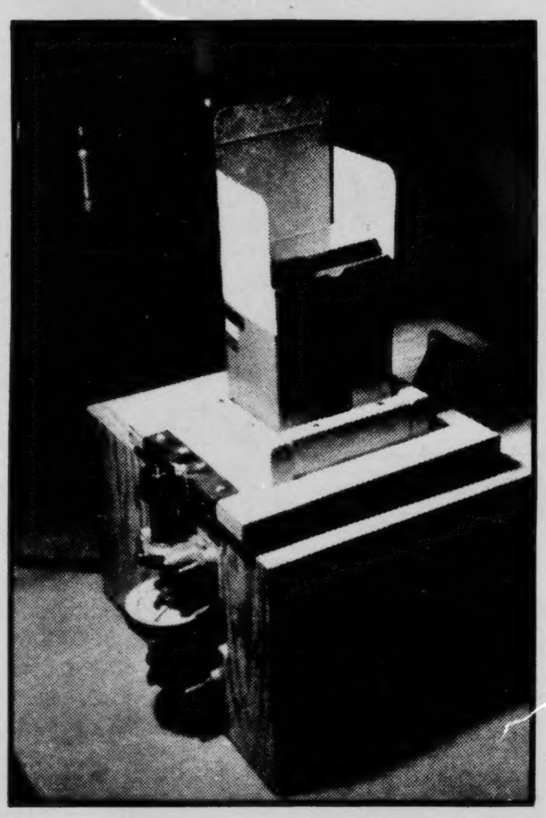
May be made at a minimal cost.

HOW IT WORKS

This device simplifies the job of picking up nails by hand from a bulk continer and repackaging them into smaller boxes. An electro-magnet, which can be obtained from an automobile air conditioner clutch, is fitted with a handle and powered by an inexpensive battery charger. With the power on, the magnet lifts a fixed quantity of nails from the bulk supply. The lifting power of the magnet can be adjusted to pick up the desired quantity of nails by weight through varying the charger's output voltage. The lifting unit is then positioned over a funnel, the power interrupted and the nails drop through into the package. The exact weight of this package is adjusted by adding to or removing nails by hand.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.

SHAKER TABLE FOR BULK PRODUCT PACKAGING



Photograph courtesy of California Department of Rehabilitation

SHAKER TABLE FOR BULK PRODUCT PACKAGING

DEVELOPER

Charles Eckles
Independent Contract
Consultant
(213) 360-4180

CONTACT PERSON

California Department of
Rehabilitation
830 "K" Street Mall
Sacramento, CA 95814
(916) 322-8500

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

difficulty in packaging the proper amount of bulk material into a snug container

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

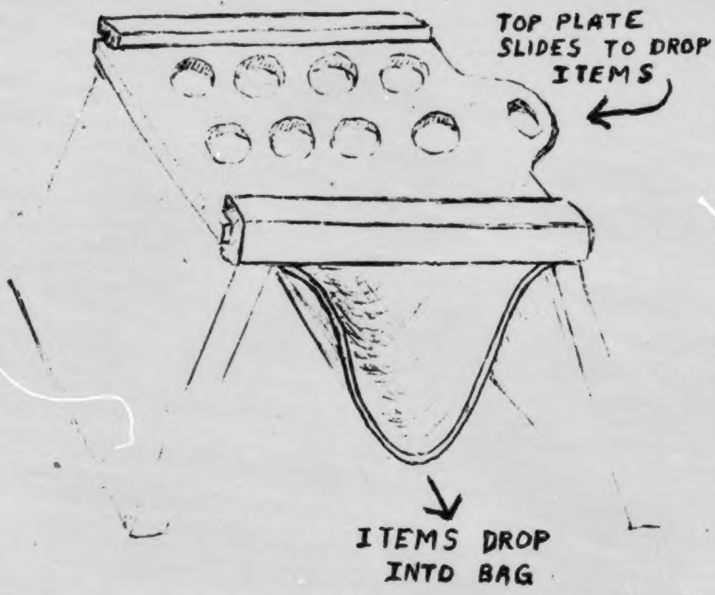
May be made at a minimal cost.

HOW IT WORKS

This jig simplifies difficult packaging jobs where the space provided does not seem large enough to hold the product. In these cases, the volume can often be reduced by vibrating the product to compact it in its container. For this kind of packaging job, the shaker table was developed. It is a plywood table supported on a rubber cushion over a box. A 1/5 h.p. motor is mounted inside the box, with a belt drive to a vertical shaft outside which has an off-center eccentric bearing on top. As the drive shaft rotates, the package is jiggled back and forth shaking its contents deeper into its interior.

(Information based on A Handbook of Workshop Production Aids, California Department of Rehabilitation.)

SHUTTER PACKAGER


TOP PLATE SLIDES TO DROP ITEMS
ITEMS DROP INTO BAG

Sketch provided by Steve Spudich

SHUTTER PACKAGER

DEVELOPER

Malcolm Eaton

CONTACT PERSON

Steve Spudich
Association for the
Handicapped
219 E. Spring Street
Freeport, IL 61032
(815) 235-7181

WHERE IT IS USED

Packaging

PROBLEM(S) IT OVERCOMES

inability to count; use of only one hand

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Association for the Handicapped
219 E. Spring Street
Freeport, IL 61032

May be made at a minimal cost.

HOW IT WORKS

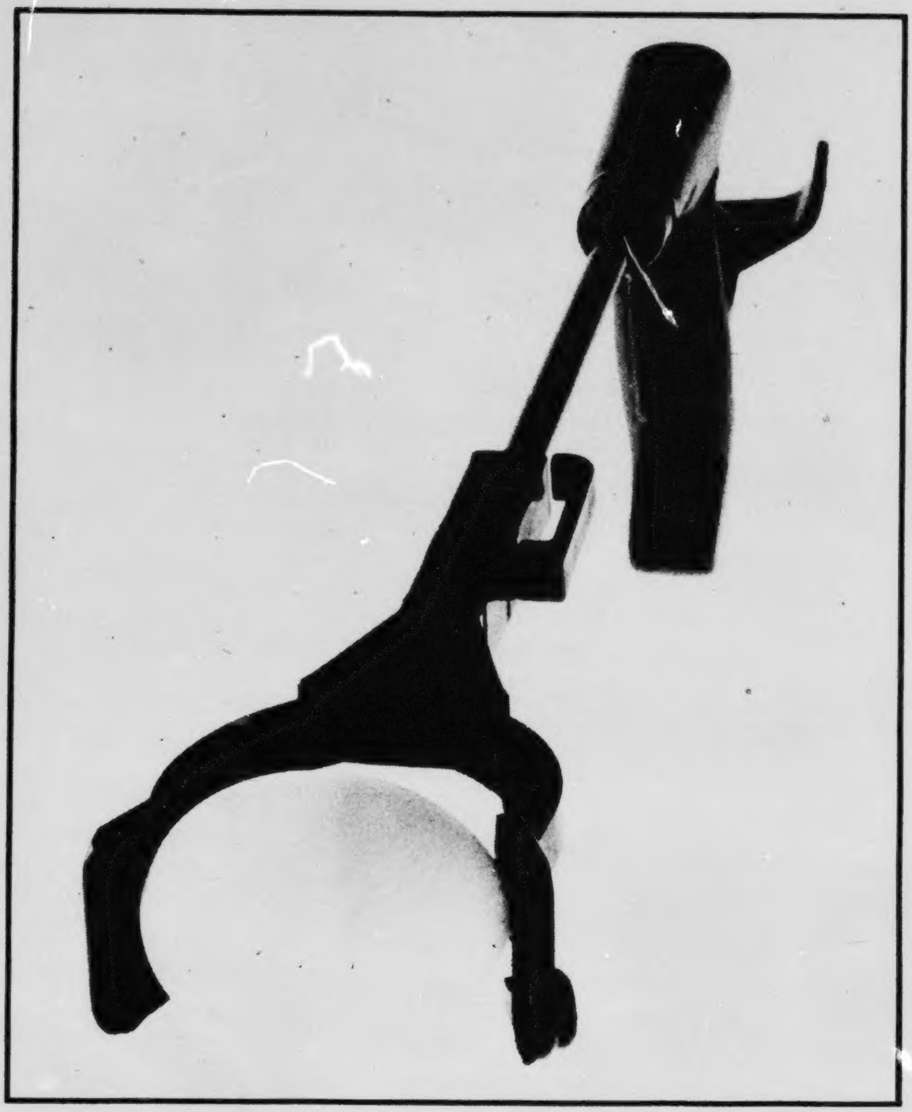
Openings are cut in a plate to conform to the size of the items to be packaged. The number of openings depends on the number of items to be bagged or boxed. After all openings are filled, the top plate is slid to allow the items to fall through the opening in the bottom plate and drop into a bag or box attached to the spout.

(Information provided by Steve Spudich, Association for the Handicapped.)

REACHING

Gustavsberg Extended Arm 538
Multipurpose Utility Stick 540
Reaching Aids 542

GUSTAVSBERG EXTENDED ARM



Photograph courtesy of AB Gustavsberg

GUSTAVSBERG EXTENDED ARM

DEVELOPER

AB Gustavsberg
S-134 00 Gustavsberg
Sweden
0766-391 00

CONTACT PERSON

Mr. Agu Kriisa
S-134 00 Gustavsberg
Sweden
0766-391 00

WHERE IT IS USED

Reaching

PROBLEM(S) IT OVERCOMES

limited reach range

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

AB Gustavsberg
S-134 00 Gustavsberg
Sweden

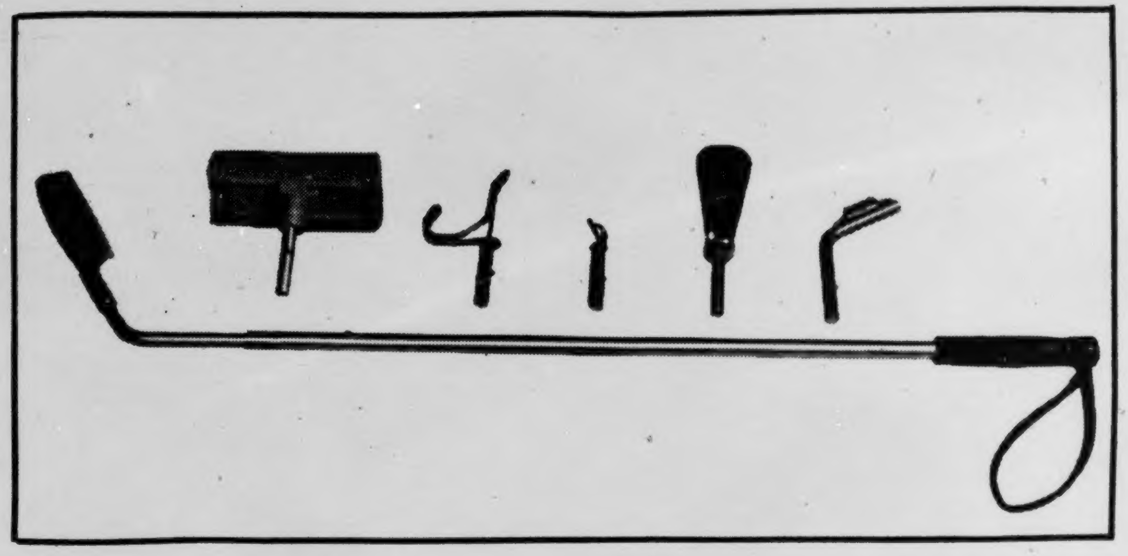
Maddak, Inc.
Pequannock, NJ 07440
(product listed as Universal Reacher)

HOW IT WORKS

These tongs are fitted with a pistol-type grip which can be operated with a straight wrist. It has a support arm allowing the arm to rest and taking the weight off the wrist. A loop and wrist link is available in place of the support arm for people with strong wrists. Three fingers using low pressure can operate the pressure key. The grab claw can be turned 360° locking automatically at the desired angle when the pressure key is depressed. On one leg of the claw is a magnet for picking up small metal objects. The gripping device can grasp flat and round objects and is fitted with a hook that makes lifting heavy objects easier. The gripping device is lightweight and lined with patterned rubber.

(Information based on Gustavsberg brochure.)

MULTIPURPOSE UTILITY STICK



Photograph courtesy of Hausmann Industries

MULTIPURPOSE UTILITY STICK

DEVELOPER

Hausmann Industries
130 Union Street
Northvale, NJ 07647
(201) 767-0255

CONTACT PERSON

Rose Rowan
Advertising Manager
Hausmann Industries
130 Union Street
Northvale, NJ 07647
(201) 767-0255

WHERE IT IS USED

Reaching

PROBLEM(S) IT OVERCOMES

restricted motion of upper extremities; joint damage

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

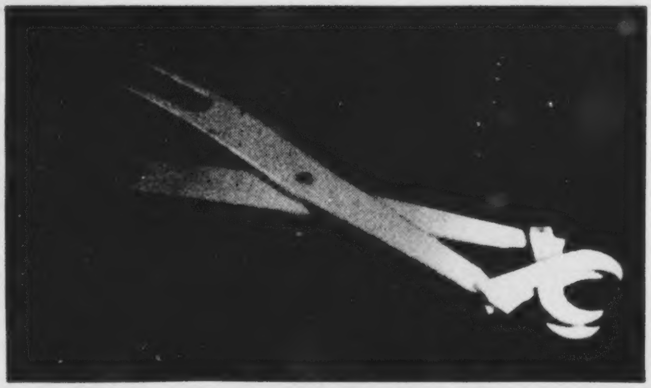
FOR SALE

Hausmann Industries
130 Union Street
Northvale, NJ 07647

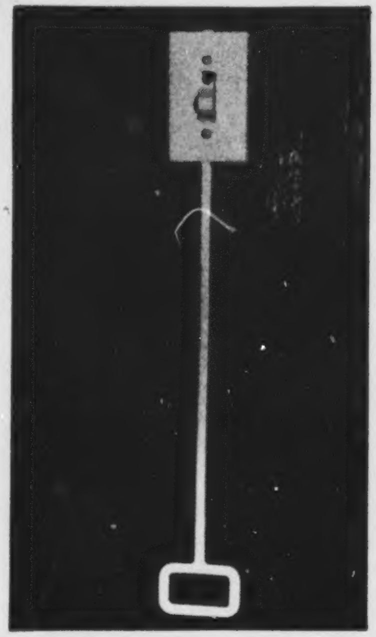
HOW IT WORKS

The following items can be attached to an anodized aluminum master shaft 24" long with a wrist strap at the end: shoe horn, comb, magnet, reaching hook, mop sponge and grasping clip.

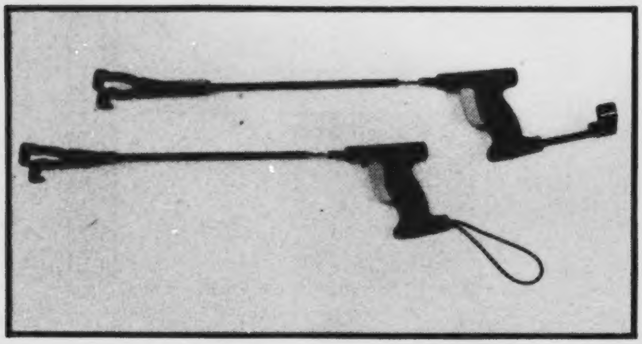
(Information based on Hausmann catalog.)



Power Grip Tongs



Light Switch
Extension Handle



Maddak Universal Reacher

Photographs courtesy of
Maddak, Inc.

REACHING AIDS

DEVELOPER

Manufactured by:
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

CONTACT PERSON

Fred M. Joslyn
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

WHERE IT IS USED

Reaching

PROBLEM(S) IT OVERCOMES

limited arm movement; confinement to a wheelchair

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc.
Pequannock, NJ 07440

Power Grip Tongs (21" long)	$39.00
Power Grip Tongs (36" long)	$49.50
Light Switch Extension Handle	$ 3.75
Maddak Universal Reacher	$43.50

HOW IT WORKS

The Power Grip Tongs are a heavy duty all plastic tool for increasing the arms' reach and providing great mechanical advantage in the gripping claw. Maximum opening of claw is 2½". The Light Switch Extension Handle is a molded plastic adapter which fits all standard toggle type wall electric switches. It is easily installed by removing the existing switch plate, and using the same screws, mounting the extension handle. The operating handle extends 17" below the switch. The Maddak Universal Reacher is a functionally designed "extended arm", light and well balanced. The full hand trigger creates a quick and positive grip with a straight wrist position. The support arm contacts the user's forearm, relieving the wrist of stress. The grab claw can be rotated a full 360°, but locks into position when the trigger is pressed. It is suitable for flat or round objects and has hooked ends for heavier loads.

(Information based on Maddak Catalog No. 479, 1979.)

READING

A7 Speech Controller 546

APH Variable Speech Control™ Module 548

Dottran - Braille Translation Program 550

Dual Image System 552

Fishburne Alphabet for the Blind . . 554

Illuminated Magnifier 556

Kurzweil Data Entry Machine 558

Kurzweil Reading Machine 560

Magazine and Bookholders 562

Model 2C Electronic Visual Aids . . 564

Optacon Print Reading System 566

Page Turner 568

Page Turner 570

Page Turners 572

Portareader Electronic Visual Aid . 574

Variable Speed Control™ Listening Adapter 576

Varispeech II Recorder 578

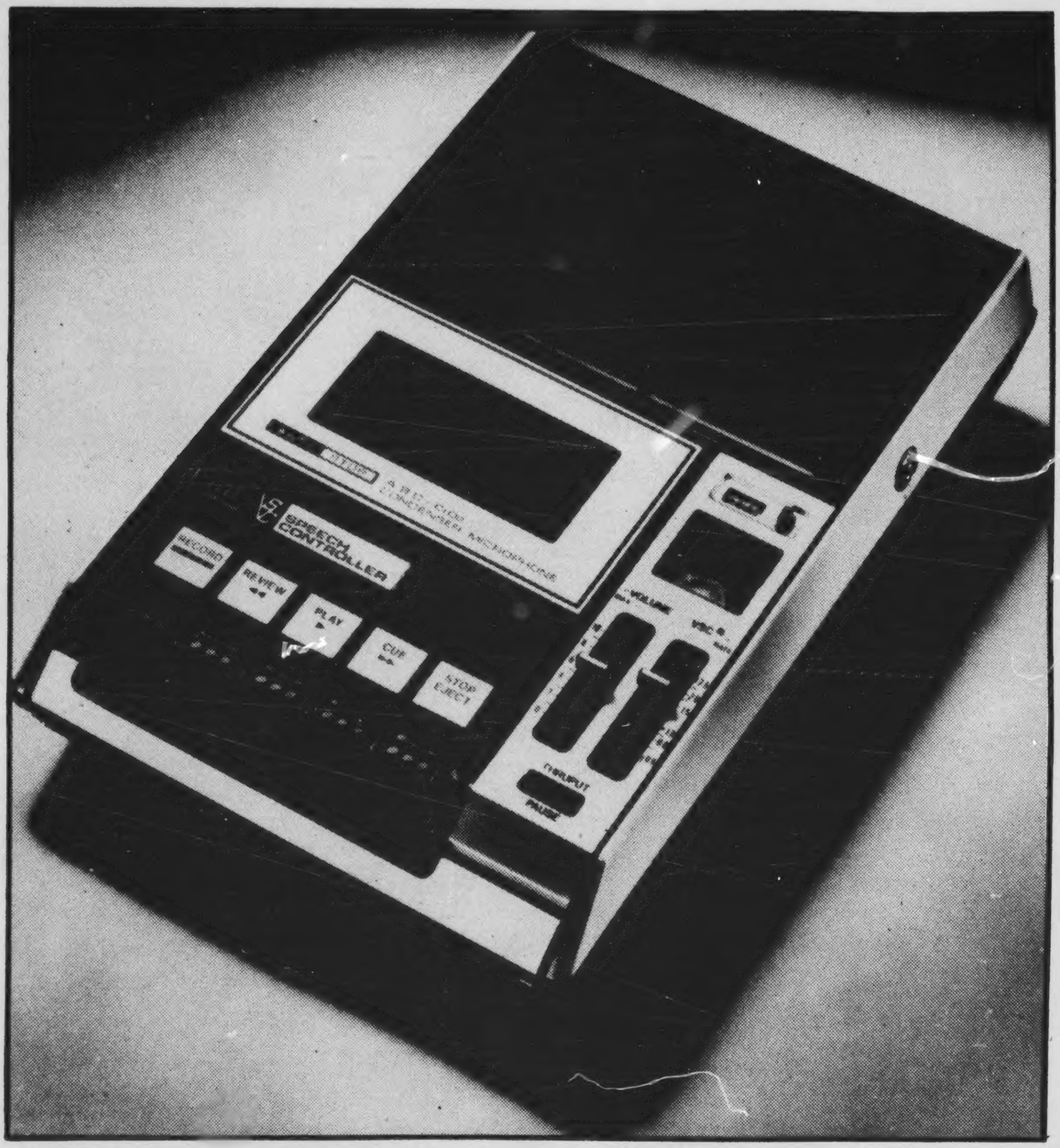
VersaBraille System 580

Video Visual Read/Write System . . . 582

Voyager 584

VSi Masterlens Systems 586

A7 SPEECH CONTROLLER


SPEECH CONTROLLER
CONDENSER MICROPHONE
RECORD
REVIEW
PLAY
CUE
STOP EJECT
VOLUME
VSC
PAUSE

Photograph courtesy of Variable
Speed Control Corporation

A7 SPEECH CONTROLLER

DEVELOPER

Variable Speed Control
 Corporation
185 Berry Street
San Francisco, CA 94107
(415) 495-6100

CONTACT PERSON

Grady Hesters
Variable Speed Control
 Corporation
185 Berry Street
San Francisco, CA 94107
(415) 495-6100

WHERE IT IS USED

Listening
Reading

PROBLEM(S) IT OVERCOMES

learning problems of the visually handicapped; improves clarity of slowed speech; used to give audio instructions at a pace which matches the skill of the worker

FIELD TESTED

yes
VA, universities

REGULATORY APPROVAL

UL for Model A7g

WARRANTY PROVIDED

yes

FOR SALE

Variable Speech Control
185 Berry Street
San Francisco, CA 94107

Also see dealer list in appendix.

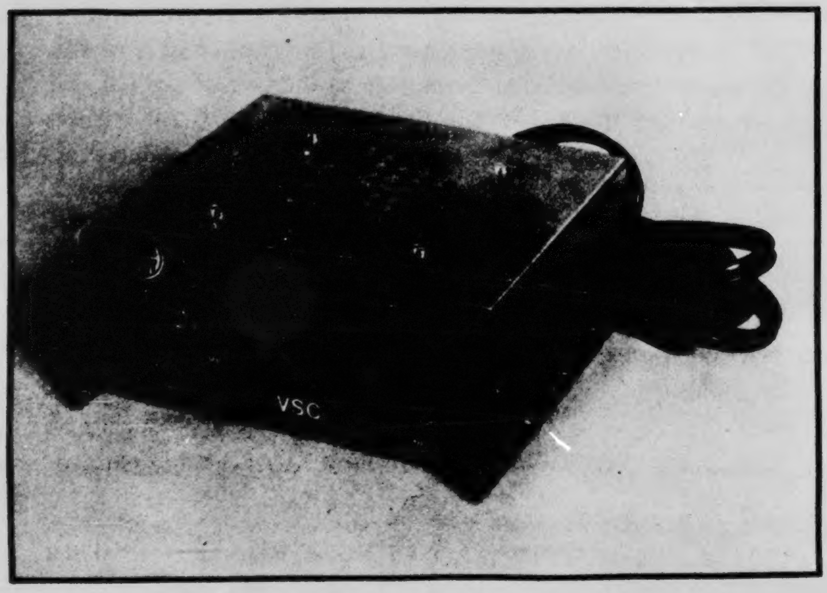
$295.00

HOW IT WORKS

The A7 Speech Controller has all the features of an ordinary cassette tape recorder plus Variable Speech Control™. This patented technology pitch corrects recorded speech from 60% to 250% of original recorded speed. A simple movement of the VSC rate-control lever adjusts speed of playback and simultaneously corrects pitch so that high-speed "chipmunk" and low-speed "grumble" effects are eliminated. The result is that a listener can audit a one-hour spoken word cassette in 30 minutes or less and understand every word, a person can listen at up to 400 words per minute.

(Information provided by Irene Gilbert Mattei, VSC.)

APH VARIABLE SPEECH CONTROL^{TM} MODULE



Photograph courtesy of
American Printing House
for the Blind

APH VARIABLE SPEECH CONTROL^{TM} MODULE

DEVELOPER

American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206
(502) 895-2405

WHERE IT IS USED

Listening
Reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

yes

FOR SALE

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

$97.50

HOW IT WORKS

The APH Variable Speech Control Module allows recorded speech to be increased or decreased without pitch distortion. It operates on 120 volts AC and has a power amplifier and speaker. Other features are a rate control, volume control, earphone jacks and off/on switch. It was designed to work with GE Cassette Recorder and the APH Talking Book Reproducer, but may also be used with any machine with a variable speed capacity.

(Information based on American Printing House for the Blind literature.)

DOTTRAN - BRAILLE TRANSLATION PROGRAM

Photograph not available

DOTTRAN - BRAILLE TRANSLATION PROGRAM

DEVELOPER

ARTS Computer Products
80 Boylston Street
Suite 1260
Boston, MA 02116
(617) 482-8248

CONTACT PERSON

Peter Duran
ARTS Computer Products
80 Boylston Street
Suite 1260
Boston, MA 02116
(617) 482-8248

WHERE IT IS USED

Education
Information Retrieval
Reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

no

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

ARTS Computer Products
80 Boylston Street
Suite 1260
Boston, MA 02116

$6,000 for complete unit

HOW IT WORKS

Dottran is a computer program consisting of a set of algorithms that translates text into Grade II Braille. It has an unlimited vocabulary therefore the translation is based on the rules of the algorithms rather than a print character to dot pattern direct correlation.
What users purchase will depend on what they have already. The Dottran Unit consists of the Dottran software stored in PROMs on an 8080 microprocessor. It is possible to purchase a binary tape of the software separately.

(Information based on ARTS literature.)

DUAL IMAGE SYSTEM

Photograph not available

DUAL IMAGE SYSTEM

DEVELOPER

Apollo Electronic Visual Aids
6357 Arizona Circle
Los Angeles, CA 90045
(213) 776-3343

CONTACT PERSON

Dennis Allen
Apollo Electronic Visual Aids
6357 Arizona Circle
Los Angeles, CA 90045
(213) 776-3343

WHERE IT IS USED

Magnification

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

UL, OSHA

WARRANTY PROVIDED

yes

FOR SALE

Apollo Electronic Visual Aids
6357 Arizona Circle
Los Angeles, CA 90045

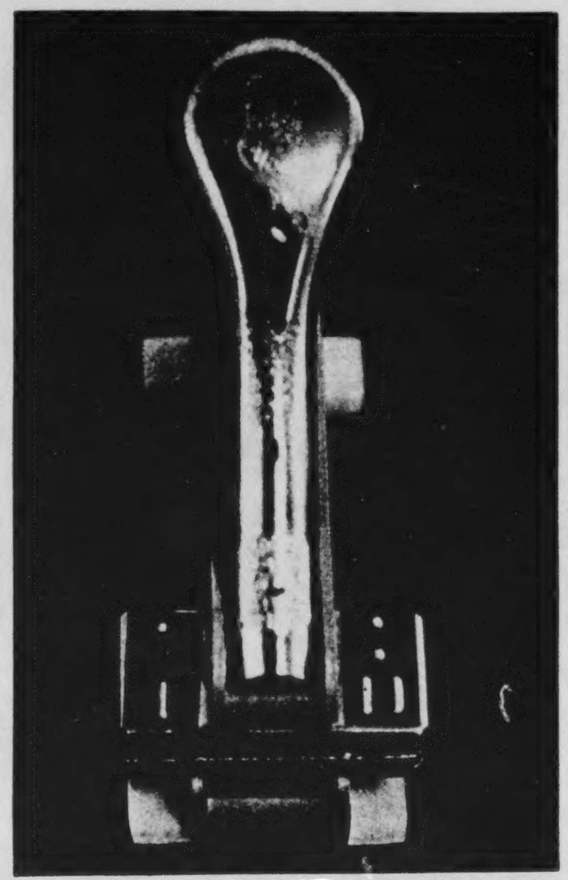
As of 1/1/80
$3,850.00

HOW IT WORKS

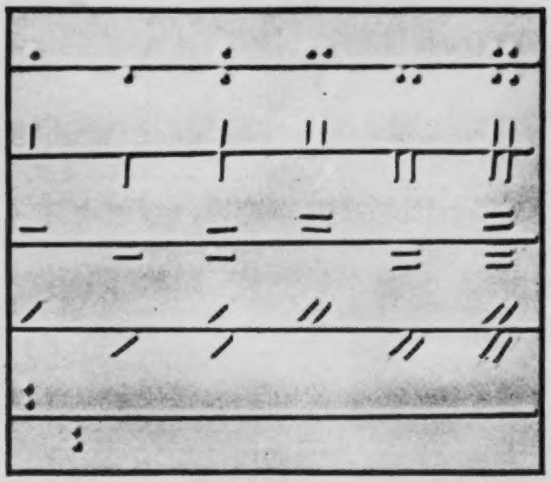
The Dual Image is a two camera, one monitor integrated system. The 17" monitor features a built-in split screen generator that permits the scenes from both cameras to appear on the monitor at the same time. The magnification of two pieces of work make it possible for the user to reference and transcribe information at the same time. It has been used in conjunction with a typewriter, a calculator and assembly materials. The size of the equipment makes it possible to use in the home or the office.

(Information based on Apollo Electronic Visual Aids product literature.)

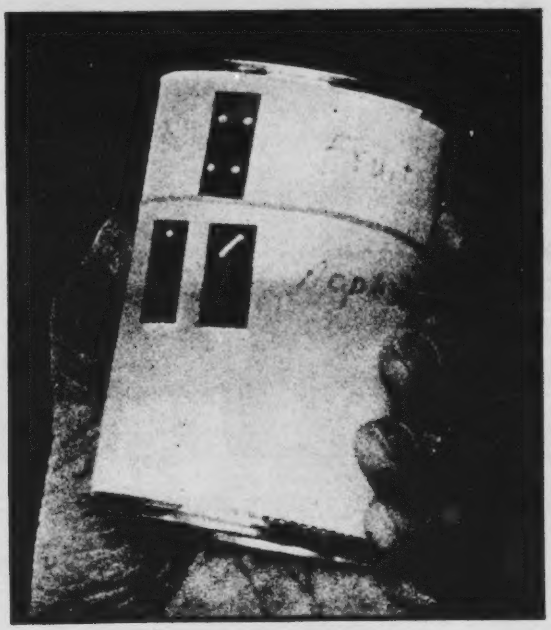
FISHBURNE ALPHABET FOR THE BLIND



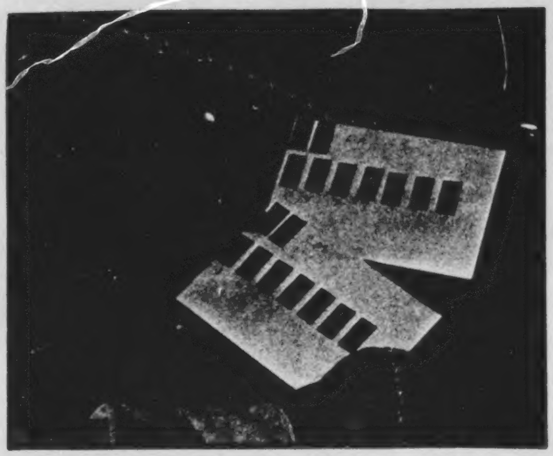
Embosser



Thermoform Master



Labeling Canned Goods



Telephone Number File Cards

Photographs courtesy of S.B. Fishburne

FISHBURNE ALPHABET FOR THE BLIND

DEVELOPER

S.B. Fishburne
4243 Warren Avenue
Sacramento, CA 95822
(916) 442-3368

CONTACT PERSON

C.C. Fishburne
Fishburne Engineering
221 N. Gordon Drive
Winston-Salem, NC 27104
(919) 765-2928

WHERE IT IS USED

Communication
Labeling
Reading
Recording Information

PROBLEM(S) IT OVERCOMES

visual impairment and inability to use Braille

FIELD TESTED

Sacramento Society for the Blind - Sacramento, CA

REGULATORY APPROVAL

no

WARRANTY PROVIDED

information not available

FOR SALE

Fishburne Engineering
221 N. Gordon Drive
Winston-Salem, NC 27104

Magnetic Training Alphabet $4.60
Embosser $21.00
Audio Cassettes #1, 2, 3 $3.50 each

HOW IT WORKS

This alphabet system of dots, dashes and slashes can be used by those who do not read Braille. Although its uses are limited, it gives the person a way to record such things as addresses, telephone numbers, labels, cassettes, etc. The system uses embossed characters which are very easy to feel and learn. Cassette tapes are available for self instruction.

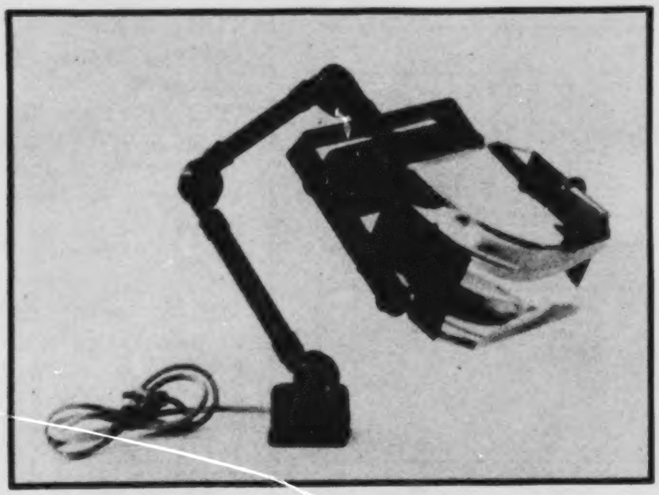
A thermoform master of the embossed alphabet characters is used as a training aid. The horizontal lines are called "Guide Lines." Each line is named for the first letter of the line - there is an "A" line, a "G" line, an "M" line, etc.

Letters are also used as numbers. Embossed single letters, mounted on magnets are used for spelling and writing words. A lightweight metal slate serves as a surface for the letters. An embosser has been engineered by Mr. Henry Sleeper of Sacramento, for Fishburne. Letters are embossed on ½" wide Dymo tape, which is cut into 1" long strips, prior to embossing. Inch long strips already cut with a tab for easy removal of adhesive cover, are available. Also available is a cutter that holds a 12' roll, and uses a trigger to cut and score 1" strips.

(Information based on Fishburne literature.)

ILLUMINATED MAGNIFIER

2x magnification



4x magnification

Photographs courtesy of
Stecker & Yale, Inc.

ILLUMINATED MAGNIFIER

DEVELOPER

Manufactured by:
Stocker & Yale, Inc.
133 Brimbal Avenue
Beverly, MA 01915
(617) 927-3940

CONTACT PERSON

Michael A. Lavey
Stocker & Yale, Inc.
133 Brimbal Avenue
Beverly, MA 01915
(617) 927-3940

WHERE IT IS USED

Magnification

PROBLEM(S) IT OVERCOMES

visual impairment; rectangular lens easy on eyes, prevents fatigue and nausea

FIELD TESTED

yes

standard industrial product

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

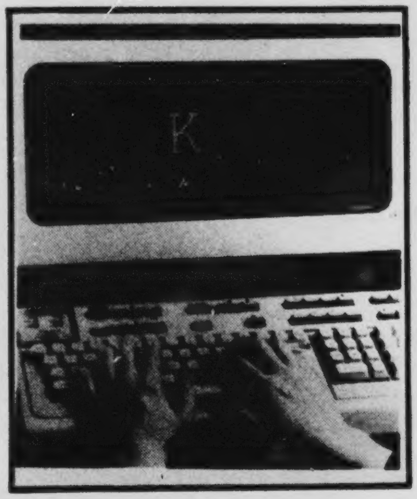
Stocker & Yale, Inc.
133 Brimbal Avenue
Beverly, MA 01915

HOW IT WORKS

A 6"x8" ground lens providing 2x or 4x magnification is coupled with a 4 watt fluorescent light. Adjustable 9"x9" arms with friction swivels and clamp or screwbase allows a 7" working distance. Operates on 115v. 60 cycle AC.

(Information based on Stocker & Yale, Inc. literature.)

KURZWEIL DATA ENTRY MACHINE



Photographs courtesy of
Kurzweil Computer Products,
Inc.

KURZWEIL DATA ENTRY MACHINE

DEVELOPER

Kurzweil Computer Products, Inc.
33 Cambridge Parkway
Cambridge, MA 02142
(617) 864-4700

CONTACT PERSON

Michael Hingson
Kurzweil Computer Products, Inc.
Print to Braille Dept.
33 Cambridge Parkway
Cambridge, MA 02142
(617) 864-4700

WHERE IT IS USED

Reading
Transcribing Braille

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

no

WARRANTY PROVIDED

yes

FOR SALE

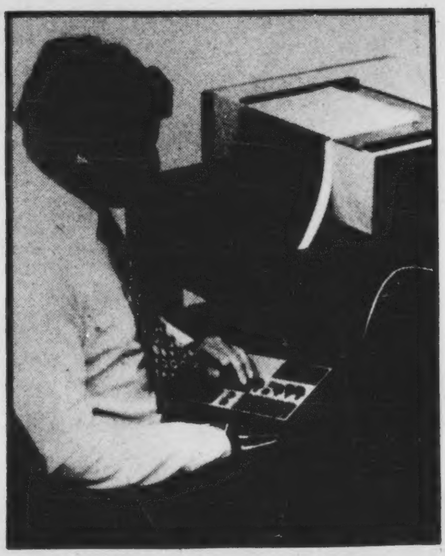
Kurzweil Computer Products, Inc.
33 Cambridge Parkway
Cambridge, MA 02142

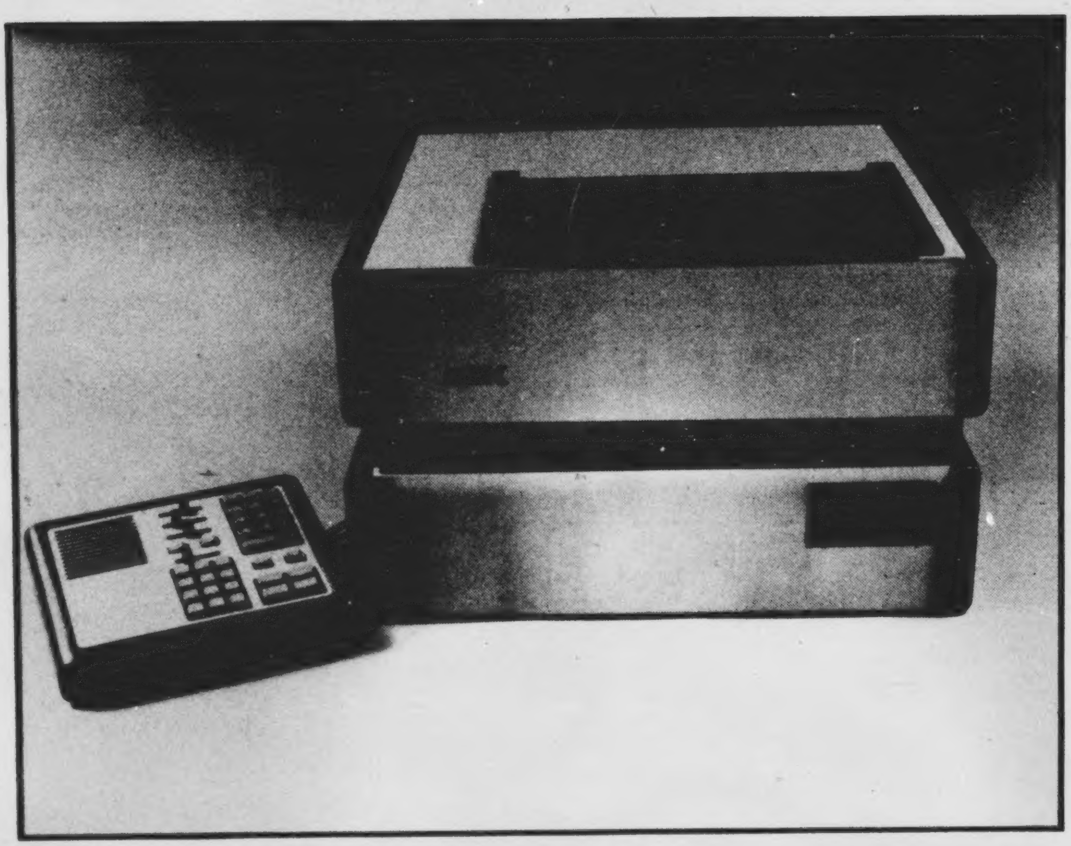
HOW IT WORKS

Printed material is converted into Grade II Braille by this system which incorporates the Kurzweil Data Entry Machine, a computer based Braille translator and a Braille embosser. The printed text is read by the Data Entry Machine and converted into standard computer code. It is then converted from computer code into Braille code by the Braille translator and then interfaces with an embosser to produce a Braille printout.

(Information based on Kurzweil Computer Products, Inc. literature; verbal explanation provided by Ron Myren, Wisconsin Vocational Studies Center.)

KURZWEIL READING MACHINE





Photographs courtesy of
Kurzweil Computer Products ,
Inc.

KURZWEIL READING MACHINE

DEVELOPER

Kurzweil Computer Products, Inc.
33 Cambridge Parkway
Cambridge, MA 02142
(617) 864-4700

CONTACT PERSON

JoAnn Giudicessi
Reading Machine Dept.
Kurzweil Computer Products, Inc.
33 Cambridge Parkway
Cambridge, MA 02142
(617) 864-4700

WHERE IT IS USED

Reading

PROBLEM(S) IT OVERCOMES

Visual impairment

FIELD TESTED

yes

National Federation of the Blind; Bureau of Ed. for the Handicapped; Rehabilitation Services Administration; VA

REGULATORY APPROVAL

no

WARRANTY PROVIDED

yes

FOR SALE

Kurzweil Computer Products, Inc.
33 Cambridge Parkway
Cambridge, MA 02142

$29,800

HOW IT WORKS

KRM consists of a desk top reading unit with scanner, an electric control unit connected to the scanner by a flexible cable, and a speaker. Material to be read is placed face down on the glass surface of the desk top reading unit. The control unit is activated by the user commanding the machine to perform various functions. The first line of the text is automatically located by the scanning mechanism and an electronic voice reads the material. With the control unit the user can adjust the reading rate and voice tone, have lines repeated, have words spelled out and have words or phrases marked for later reference (analogous to underlining). A hand tracking option allows the user to manually scan a page and determine the location of columns of type, pictures and diagrams. Users can quickly switch back and forth between automatic and manual tracking. The keyboard of the reading machine can be converted into a talking calculator performing the standard functions and all scientific functions. The KRM can also be used to convert English text from a computer or CRT terminal into speech.

(Information based on Kurzweil Computer Products, Inc. brochure.)

MAGAZINE AND BOOKHOLDERS

Photograph not available

MAGAZINE AND BOOKHOLDERS

DEVELOPER

Carl H. Beil
5435 N. Artesian Avenue
Chicago, IL 60625

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Reading

PROBLEM(S) IT OVERCOMES

limited hand or arm movement

FIELD TESTED

yes

informally at Hines Veteran's Hospital and the Rehabilitation Institute of Chicago

REGULATORY APPROVAL

not applied for

WARRANTY PROVIDED

yes

FOR SALE

C. Beil Designs
5435 N. Artesian Avenue
Chicago, IL 60625

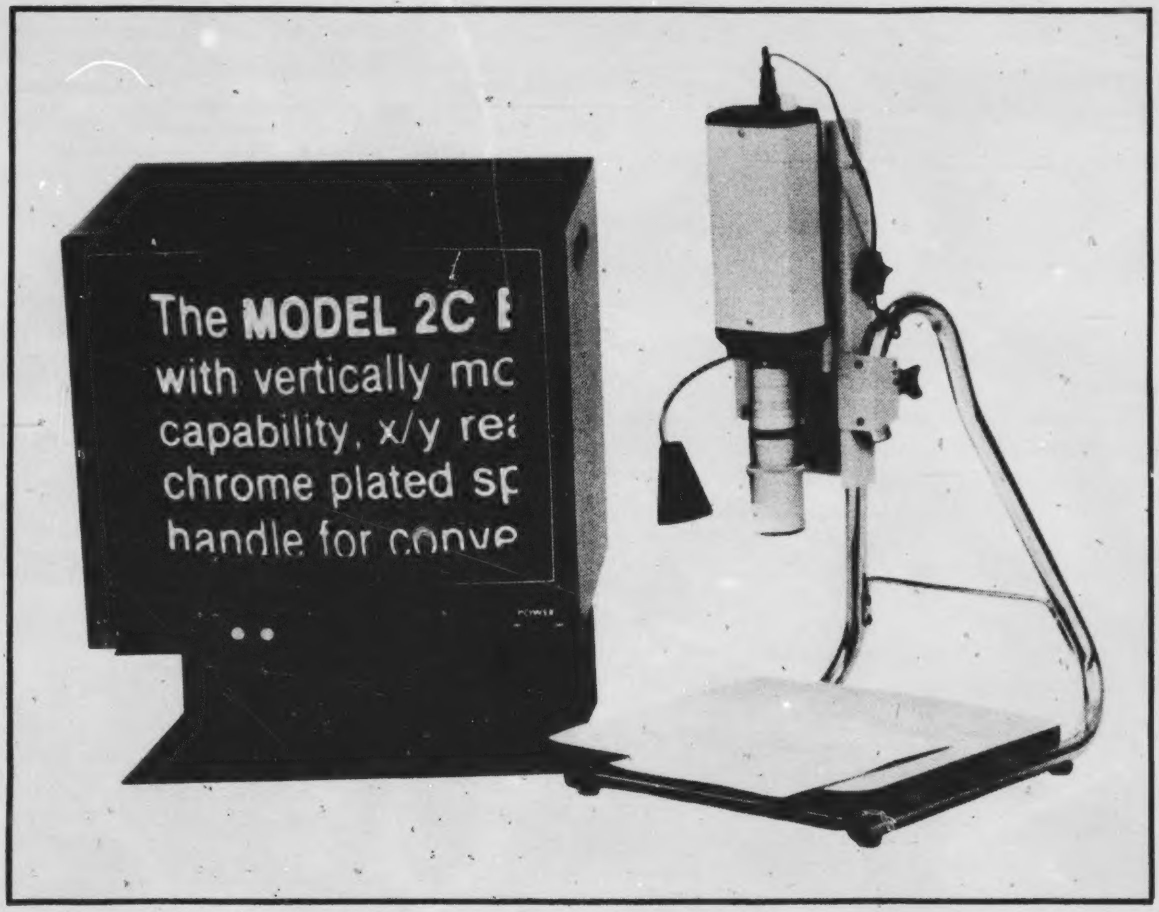
F. Sammons Co., Inc.
Box 32
Brookfield, IL 60513

HOW IT WORKS

Attach to furniture or equipment for support. Holds any size hard or soft cover book up to 8" x 11". Pages may be turned by hand or with the use of a mouth or head stick.

(Information provided by Carl H. Beil, C. Beil Designs.)

MODEL 2C ELECTRONIC VISUAL AIDS



The MODEL 2C E
with vertically mo
capability, x/y rea
chrome plated sp
handle for conve
POWER

Photograph courtesy of Apollo
Electronic Visual Aids

MODEL 2C ELECTRONIC VISUAL AIDS

DEVELOPER

Apollo Electronic Visual Aids
6357 Arizona Circle
Los Angeles, CA 90045
(213) 776-3343

CONTACT PERSON

Dennis Allen
Apollo Electronic Visual Aids
6357 Arizona Circle
Los Angeles, CA 90045
(213) 776-3343

WHERE IT IS USED

Magnification

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

UL, OSHA

WARRANTY PROVIDED

yes

FOR SALE

Apollo Electronic Visual Aids
6357 Arizona Circle
Los Angeles, CA 90045

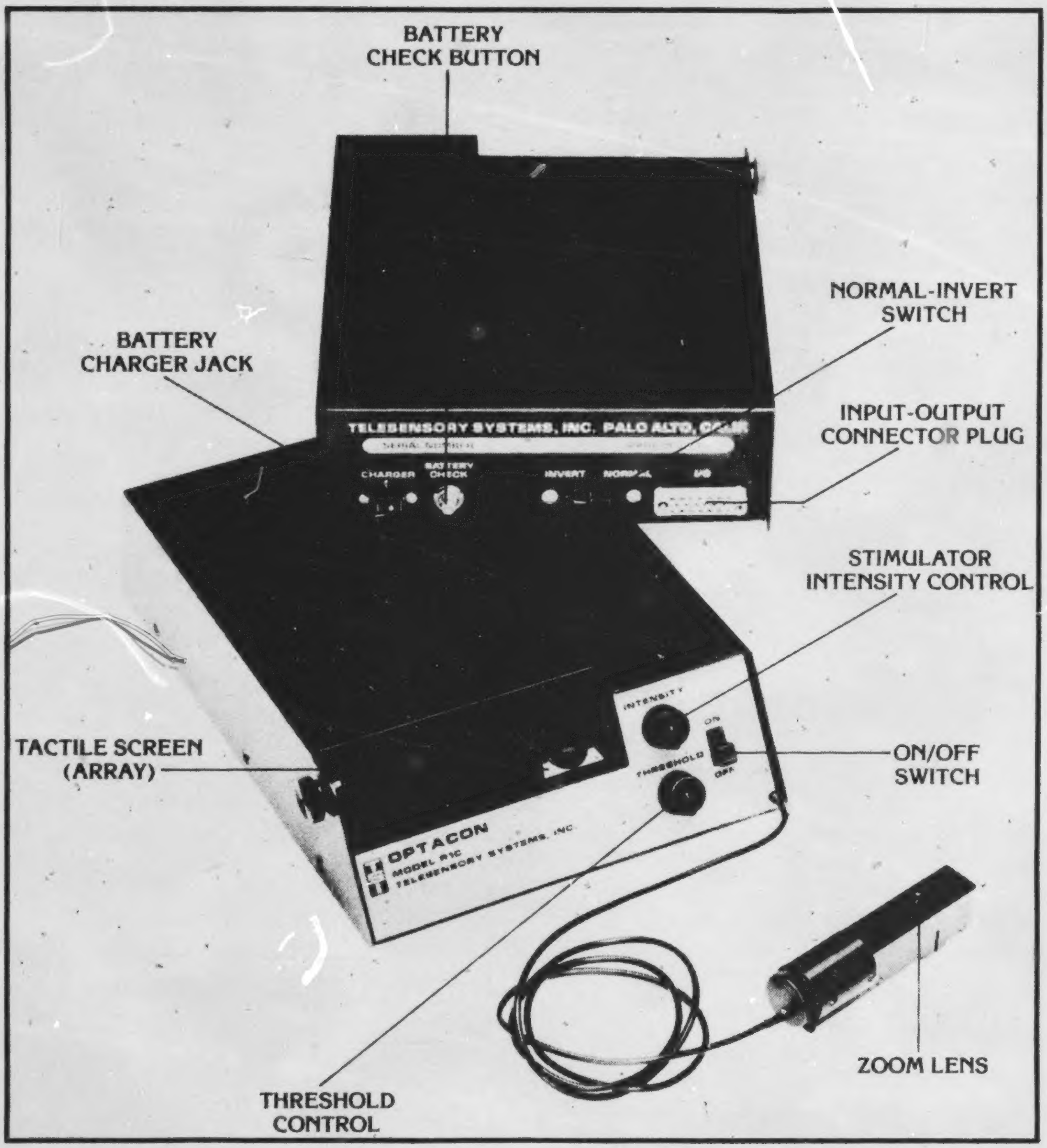
As of 1/1/80
$2,450.00

HOW IT WORKS

The Model 2C EVA consists of a CRT viewing monitor and stand; a camera support system with a vertically mounted video camera that easily swings up and around for complete pan and tilt capability; an x/y reading platform; and a built-in typing aid. The camera stand has support tubes, anodized aluminum camera bracket and a built-in carrying handle.
The Model 2C makes it easier to view any ink printed material, photos across the room, or what is being typed. It is possible to: 1. isolate one line (or more) of print at a time, 2. compensate for camera positioning so the image is not upside-down or inside-out, and 3. select black-on-white (positive) or white-on-black (negative) images. It has magnifying capabilities of 6X to 60X, from 7" to infinity focusing without closeup lenses.

(Information provided by Dennis Allen, Apollo Electronic Visual Aids.)

OPTACON PRINT READING SYSTEM


BATTERY CHECK BUTTON
NORMAL-INVERT SWITCH
BATTERY CHARGER JACK
INPUT-OUTPUT CONNECTOR PLUG
TELESENSORY SYSTEMS, INC. PALO ALTO, CALIF.
CHARGER
BATTERY CHECK
INVERT
NORMAL
I/O
STIMULATOR INTENSITY CONTROL
INTENSITY
ON
OFF
THRESHOLD
ON/OFF SWITCH
TACTILE SCREEN (ARRAY)
OPTACON
MODEL R1C
TELESENSORY SYSTEMS, INC.
ZOOM LENS
THRESHOLD CONTROL

Photograph courtesy of Telesensory Systems Inc.

OPTACON PRINT READING SYSTEM

DEVELOPER

Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304
(415) 493-2626

CONTACT PERSON

John Beard, Manager
North American Marketing
Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304
(415) 493-2626

WHERE IT IS USED

Reading
Education

PROBLEM(S) IT OVERCOMES

blindness; access to print material

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304

$3,995.00

HOW IT WORKS

The Optacon provides independent access to print for blind people. The Optacon, (Optical to Tactile Converter), consists of a camera, a series of electronic components which convert the optical impression from the camera into electronic signals, and a tactile array which provides an enlarged, vibrating representation of the image the camera is receiving. As a user moves the camera across a line of print with one hand, he or she simultaneously feels the tactile image of the print vibrating beneath the index finger of the other hand.

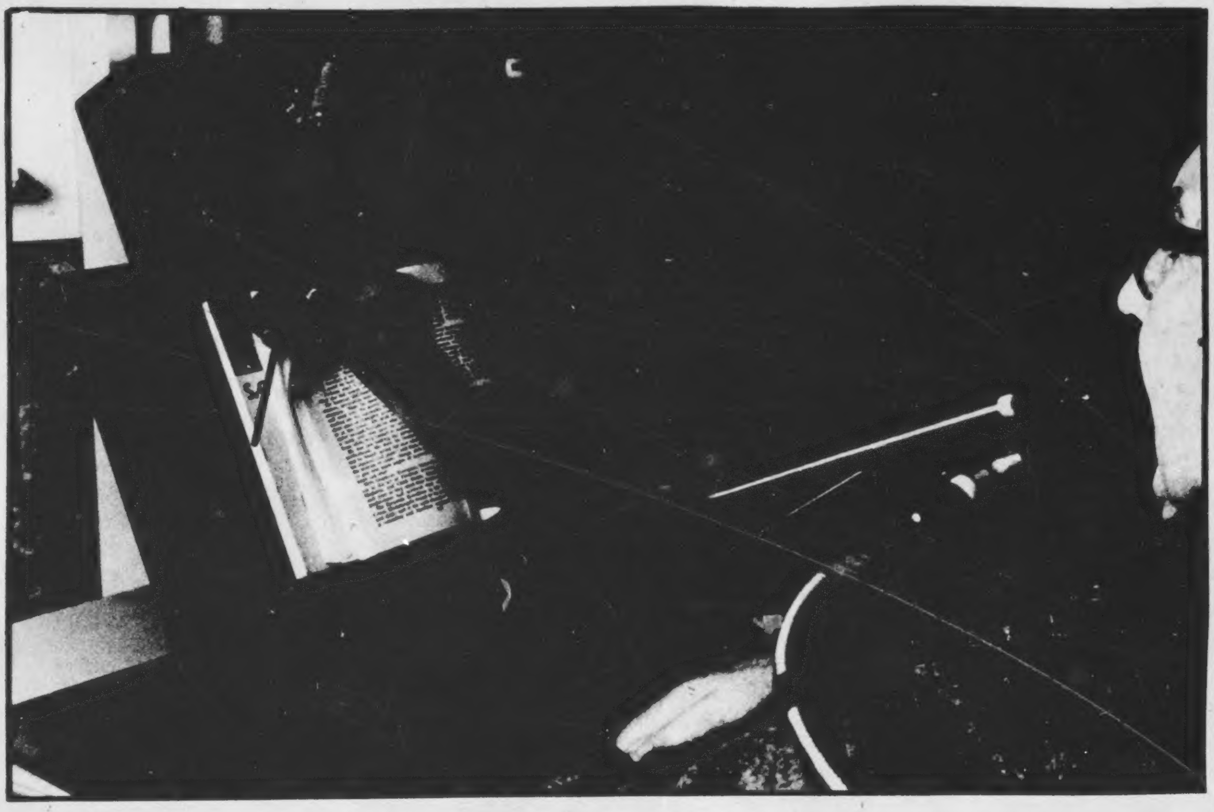
Successful use of the Optacon is based on the development and coordination of special skills. These skills are acquired through initial training with a qualified Optacon teacher, followed by diligent practice.

Lens modules for reading calculators, computer terminals, fine print, and for monitoring typing, expand the device's personal, educational and vocational utility.

These items and training accessories are available for sale, from the company.

(Information reprinted with permission from Telesensory Systems, Inc. literature.)

PAGE TURNER



Photograph courtesy of Possum
Controls, Inc.

PAGE TURNER

DEVELOPER

Possum Controls, Inc.
11 Fairacres Industrial Estate
Windsor, Berkshire
England

CONTACT PERSON

Ann F. Gurr
Possum, Inc.
P.O. Box 451
Midwood Station
Brooklyn, NY 11230
(212) 243-1658

WHERE IT IS USED

Reading

PROBLEM(S) IT OVERCOMES

inability to turn book pages

FIELD TESTED

yes

Britain

REGULATORY APPROVAL

FDA

WARRANTY PROVIDED

yes

FOR SALE

Possum, Inc.
P.O. Box 451
Midwood Station
Brooklyn, NY 11230

$625.00 + shipping

HOW IT WORKS

This battery operated machine turns the pages of common size books. It can be operated pneumatically or with light pressure microswitches. (See Possum™ Input Controls (p. 312) for types of input switches.) A page retainer holds the book flat. Adjustment can be made to accommodate paper quality and thickness and desired bookrest angle.

(Information based on Possum Controls, Inc. literature.)

545

PAGE TURNER

Photograph not available

PAGE TURNER

DEVELOPER

WTB, Inc.
1259 Millikin Pl., N.E.
Warren, OH 44483
(216) 372-6316

CONTACT PERSON

WHERE IT IS USED

Reading

PROBLEM(S) IT OVERCOMES

inability to turn pages without assistance

FIELD TESTED

yes

sold to hospitals and individuals across U.S.A. and Canada

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

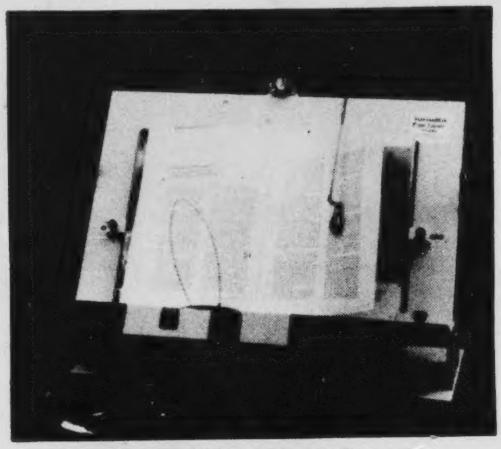
WTB, Inc.
1259 Millikin Pl., N.E.
Warren, OH 44483

$535.00

HOW IT WORKS

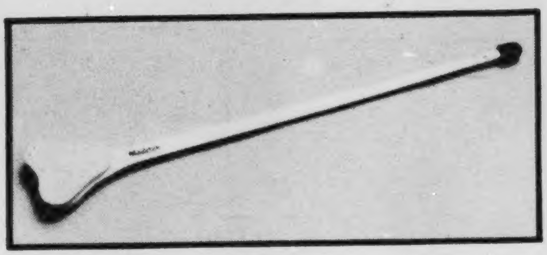
After the book is set in the turner at the position-line and the book's covers taped down, the user presses the switch to activate the weighted rollers. The roller will move to the edge of the page, lower itself, reverse and lift the page, winding until the page is taut and will peel off and be turned. The pages are held down by a thin nylon line. The unit can be used flat or at a 45° angle. It holds books or magazines up to 9"x11½"x1½".

(Information based on WTB, Inc. literature.)



Automaddak Page Turner

Page Turner - Hand Held



Page Turner - Mouth Held

Photographs courtesy of
Maddak, Inc.

PAGE TURNERS

DEVELOPER

Manufactured by:
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

CONTACT PERSON

Fred M. Joslyn
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

WHERE IT IS USED

Reading

PROBLEM(S) IT OVERCOMES

manipulation difficulty

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc.
Pequannock, NJ 07440

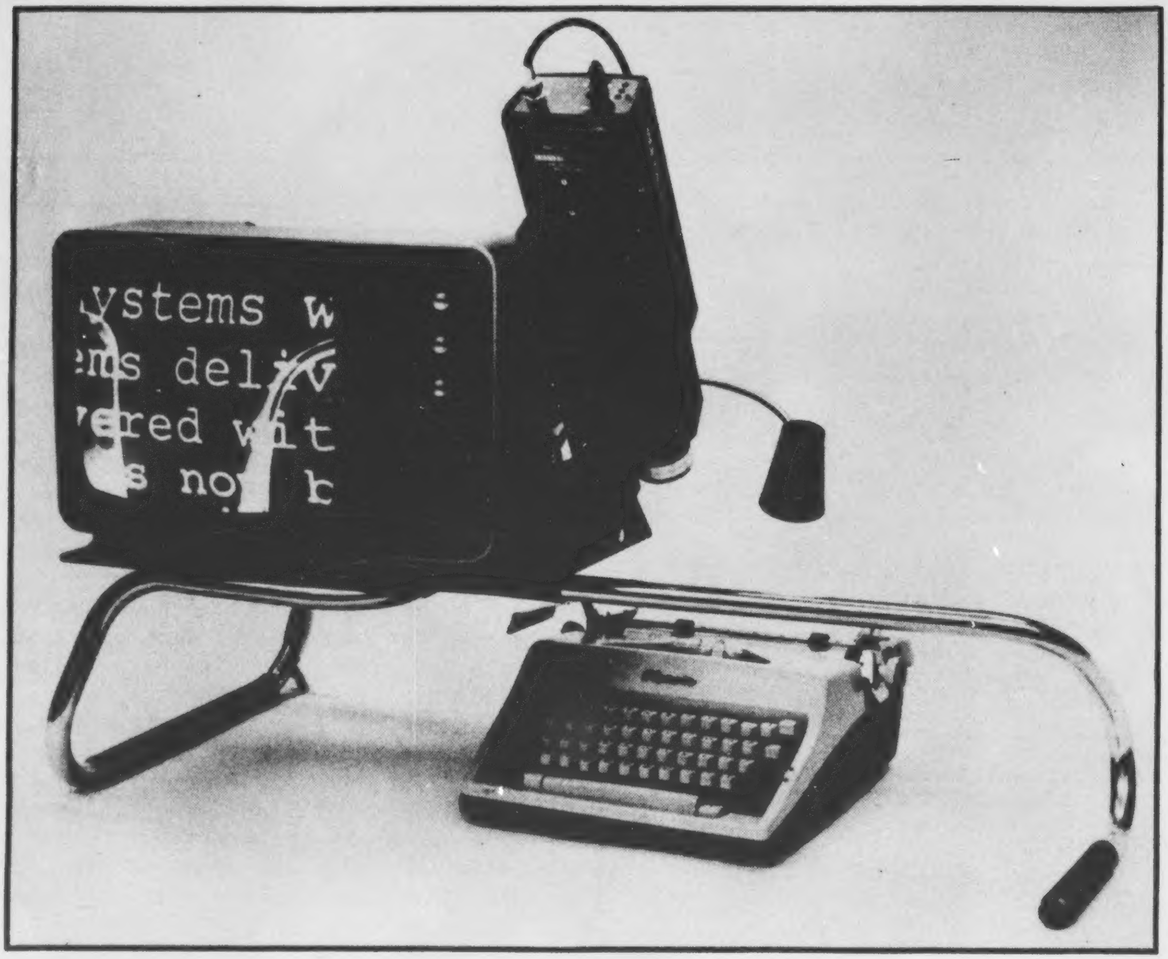
Automaddak^R Page Turner	$471.00
Page Turner - Hand Held	$ 14.50
Page Turner - Mouth Held	$ 4.50

HOW IT WORKS

The Automaddak^R Page Turner accommodates any size book or magazine. Each page is turned automatically at the reader's command. The book or magazine is positioned against the back panel with both covers held in place by adjustable plastic clips. Operation of the Page Turner is controlled either by a breath switch which is sensitive to a puff of breath through a mouthpiece, or a small sensitive touch bellows control which responds to slight pressure on a plastic pad by any part of the body. The Page Turner can be adjusted from horizontal to almost vertical. The Page Turner - Hand Held is a curved polycarbonate tapered strip with foam rubber tip for easy flipping of pages (even heavy coated paper). The Page Turner - Mouth Held is made of light weight plastic with a serrated rubber tip for good paper contact. The upper end is heart shaped and flat with medium-soft rubber plates adhered to the surface for easy grip and comfortable contact with teeth.

(Information based on Maddak Catalog No. 479, 1979.)

PORTAREADER ELECTRONIC VISUAL AID


ystems w
ems deliv
ered wit
s no b

Photograph courtesy of Apollo
Electronic Visual Aids

PORTAREADER ELECTRONIC VISUAL AID

DEVELOPER

Apollo Electronic Visual
Aids
6357 Arizona Circle
Los Angeles, CA 90045
(213) 776-3343

CONTACT PERSON

Dennis Allen
Apollo Electronic Visual
Aids
6357 Arizona Circle
Los Angeles, CA 90045
(213) 776-3343

WHERE IT IS USED

Magnification

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

UL, OSHA

WARRANTY PROVIDED

yes

FOR SALE

Apollo Electronic Visual Aids
6357 Arizona Circle
Los Angeles, CA 90045

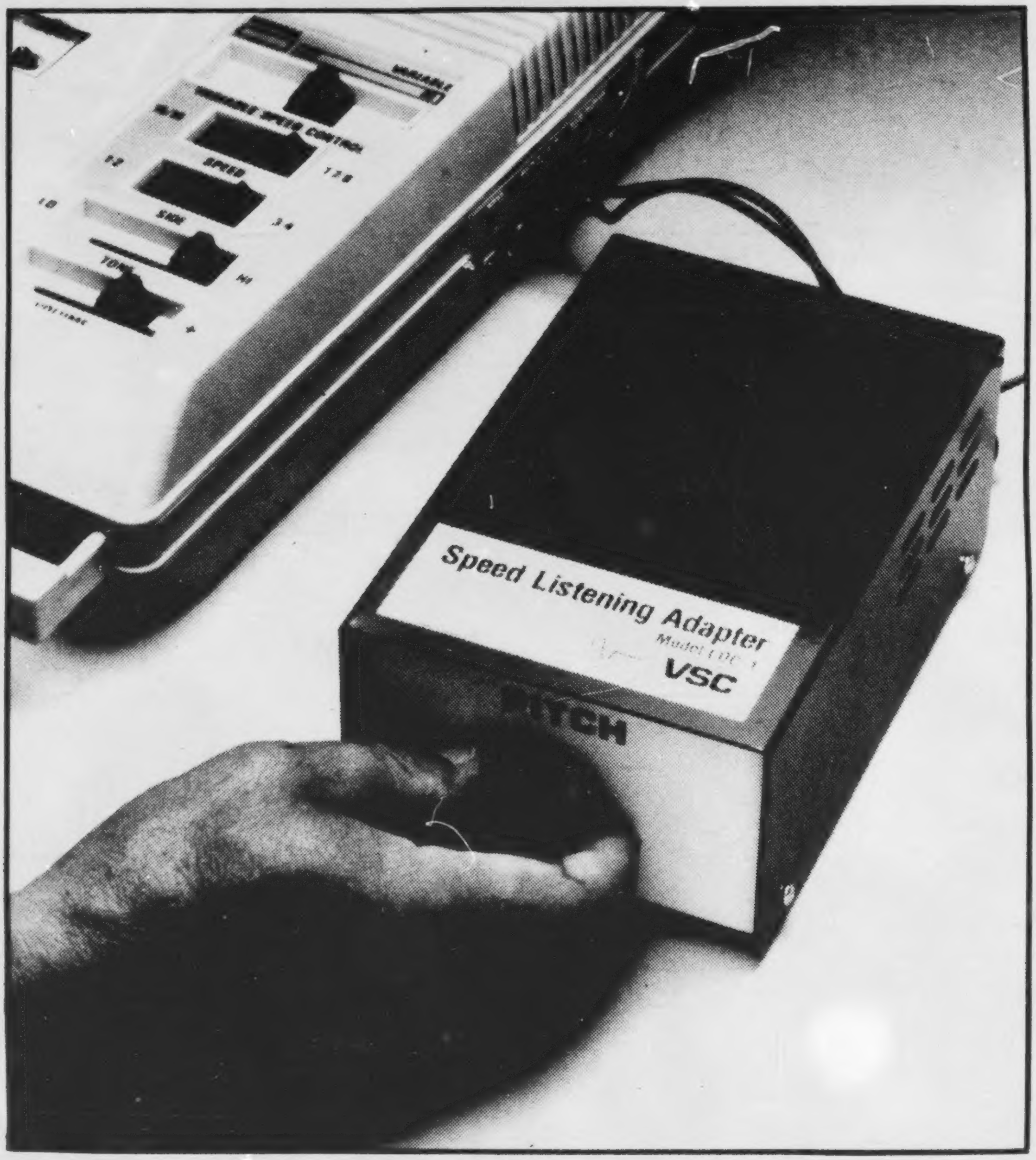
As of 1/1/80
PortaReader $1,550.00
Deluxe PortaReader $1,650.00

HOW IT WORKS

The PortaReader EVA is a portable, lightweight device consisting of a CRT viewing monitor mounted on a collapsible stand together with a video camera, zoom lens, and illuminator. The heavy gauge anodized aluminum platform is supported by three integrated retractable legs which easily fold into a compact carrying handle. There is ample work space beneath the lens. The PortaReader makes viewing of any ink printed material, photos, material across the room, or seeing what is being typed easier. It is possible to: 1. isolate one line (or more) of print at a time, 2. compensate for camera positioning so image is not upside-down or inside-out, and 3. select black-on-white (positive) or white-on-black (negative) images.
It has magnifying capabilities of 4X to 45X. Also available is the Deluxe PortaReader, which has a special zoom lens which allows ease in focusing.

(Information based on Apollo Electronic Visual Aids product literature.)

VARIABLE SPEED CONTROL^{TM} LISTENING ADAPTER


VARIABLE
VARIABLE SPEED CONTROL
SPEED
TONE
Speed Listening Adapter
VSC

Photograph courtesy of Variable
Speed Control Corporation

VARIABLE SPEED CONTROL^{TM} LISTENING ADAPTER

DEVELOPER

Variable Speed Control
Corporation
185 Berry Street
San Francisco, CA 94107
(415) 495-6100

CONTACT PERSON

Grady Hesters
Variable Speed Control
Corporation
185 Berry Street
San Francisco, CA 94107
(415) 495-6100

WHERE IT IS USED

Listening
Reading

PROBLEM(S) IT OVERCOMES

visual impairment; improves clarity of slowed speech

FIELD TESTED

yes

tested by VA; Arkansas Enterprises for the Blind; American Foundation for the Blind, and others

REGULATORY APPROVAL

UL on AC component

WARRANTY PROVIDED

yes

FOR SALE

Variable Speed Control Corporation
185 Berry Street
San Francisco, CA 94107

Also see dealer list in appendix.

$95.00

HOW IT WORKS

This device is designed to use with the Library of Congress (LOC) C-76, C-77 and later model 4-track cassette players. The listener can speed up a cassette on the LOC player, then pitch correct the "chipmunk" sound at up to 2.5 times faster than the recorded speed. It has braille markings and large print and braille instructions. Two permanently attached cords are designed to plug directly into the LOC player. One cord carries the high pitched speeded speech to the adapter, the other returns pitch-corrected speech to the player where it is heard through the player's speaker.

(Information provided by Irene Gilbert Mattei, VSC.)

VARISPEECH II RECORDER

Photograph courtesy of
Lexicon, Inc.

VARISPEECH II RECORDER

DEVELOPER

Lexicon, Inc.
60 Turner Street
Waltham, MA 02154
(617) 891-6790

CONTACT PERSON

Jack Letscher
Lexicon, Inc.
60 Turner Street
Waltham, MA 02154
(617) 891-6790

WHERE IT IS USED

Listening
Reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Lexicon, Inc.
60 Turner Street
Waltham, MA 02154

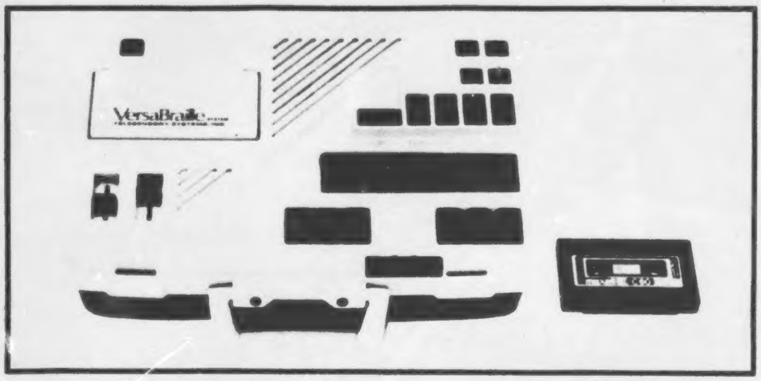
$595.00 F.O.B. Waltham, MA

HOW IT WORKS

Varispeech II is a recorder and a speech time compressor and expander which utilizes advanced digital processing techniques. It allows you to play back recordings at ½ to 2½ times the speed of the original, and preserves the speaker's original pitch and tonal qualities. It works like any other conventional cassette recorder, and requires no special training to use. The only nonconventional control is the speed factor knob which is calibrated and turned clockwise or counterclockwise to increase or decrease listening speed. Special options are available which allow use with the Library of Congress 4-track tape formats.

(Information provided by Nancy Greenfield, Lexicon, Inc.)

VERSABRAILLE SYSTEM


VersaBraille

Photograph courtesy of Telesensory Systems Inc.

VERSABRAILLE SYSTEM

DEVELOPER

Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304
(415) 493-2626

CONTACT PERSON

John Beard, Manager
North American Marketing
Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304
(415) 493-2626

WHERE IT IS USED

Education
Filing
Reading
Recording Information
Writing

PROBLEM(S) IT OVERCOMES

blindness; storage and retrieval of braille materials

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

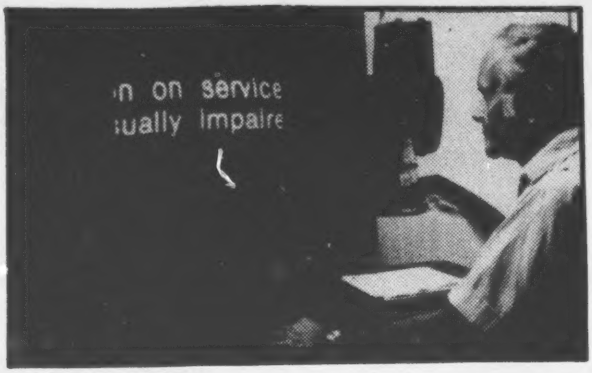
Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304

HOW IT WORKS

The VersaBraille system is an electronic braille information system which records braille in electronic impulses on cassette tape and displays braille on a twenty character line of electromechanical cells. The VersaBraille system is a quiet and efficient writing, reading and notetaking system, and a compact way of storing brailled text.
It is also an audio tape recorder which can record sound and braille on the same tape, and can provide an index and automatic retrieval system for both braille and audio materials. Attachment to computers, typewriters, or teletypewriters will increase the system's utility in many vocational settings. Various options are available at an additional cost.

(Information reprinted with permission from Telesensory Systems Inc. literature.)

VIDEO VISUAL READ/WRITE SYSTEM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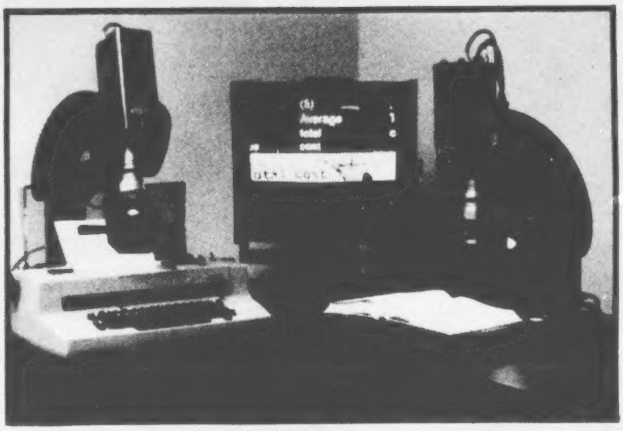

Average
total
cost

RS Series

Miniviewer

Commuter

strate comparit
5 vs. 20X at 120
20X

Microviewer

Photographs courtesy of Visual-tek

VIDEO VISUAL READ/WRITE SYSTEM

DEVELOPER

Visualtek
1610 26th Street
Santa Monica, CA 90404
(213) 829-6841

CONTACT PERSON

Hank Cunningham
1920 E. 87th Street
Bloomington, MN 55420
(612) 854-6098

or Marc Stenzel
Visualtek
(213) 829-6841

WHERE IT IS USED

Reading

PROBLEM(S) IT OVERCOMES

visual impairment in reading and writing

FIELD TESTED

yes
throughout U.S. and Canada

REGULATORY APPROVAL

Department of Building and Safety -
Los Angeles, CA

WARRANTY PROVIDED

yes

FOR SALE

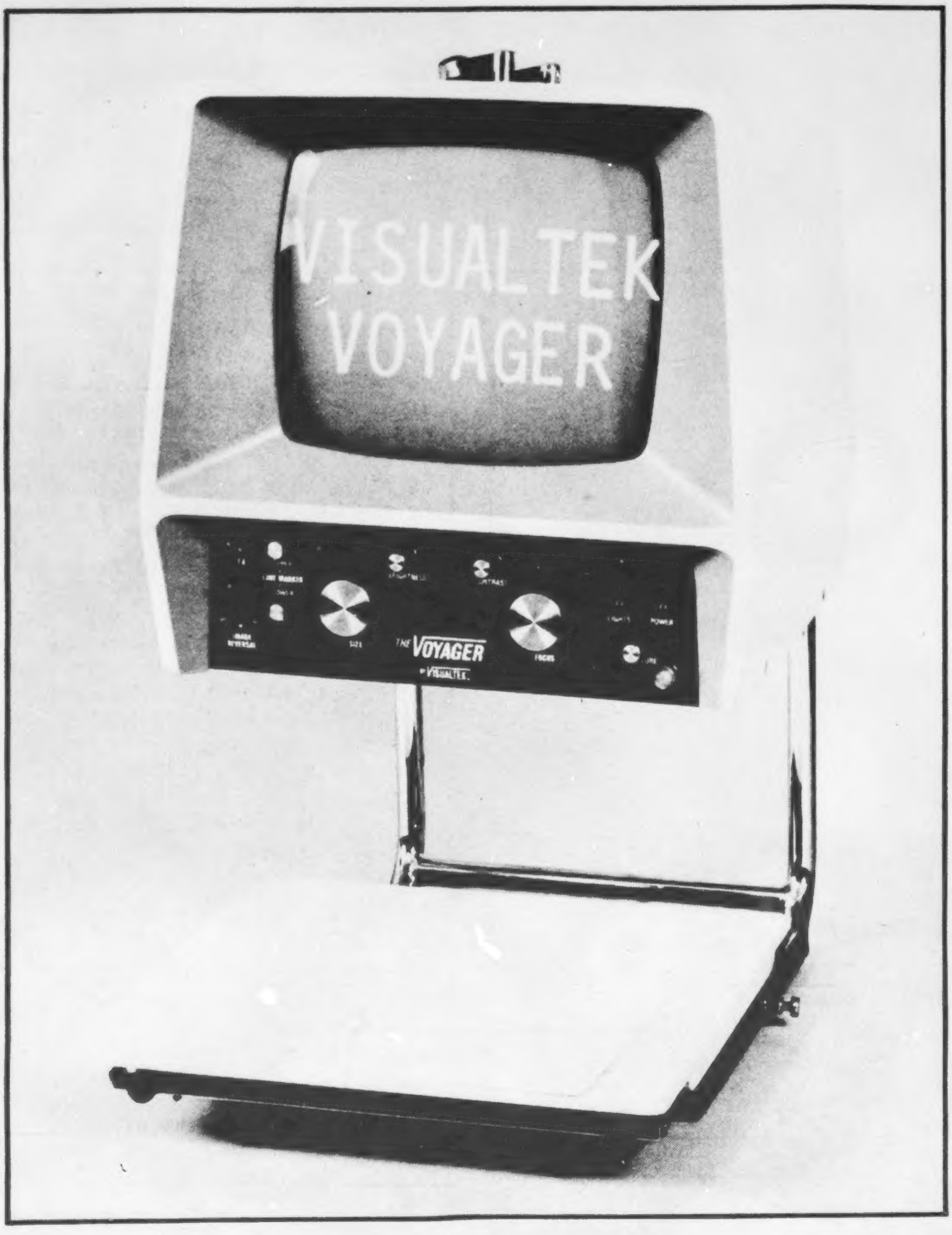
Visualtek
1610 26th Street
Santa Monica, CA 90404

HOW IT WORKS

The system utilizes a closed circuit TV camera, zoom lens and television monitor to magnify printed material and electronically enhance its brightness and contrast. User adjusts magnification, brightness and whether to view it as white on a black background or black on a white background. Some types of models are: RS - provides large field of view, high contrast levels and 60X magnification; RS-7 Typing Aid - by flicking a switch user can alternately view material in the typewriter and material being copied or simultaneously view these materials. used with either moving-platen or fixed-platen IBM selectric typewriters; Miniviewer- portable with all components recessed for protection while in transit, provides 4X to 45X magnification, can accommodate over-sized materials; Commuter - small, portable with up to 15X magnification; Microviewer - added to an RS series or miniviewer, user can simultaneously view the magnified microfiche and his/her own note taking on a split screen. Also available is a drafting camera base and aids for viewing computer display terminals, see Cathode Ray Tube Viewing System.

(Information based on Visualtek literature.)

VOYAGER


VISUALTEK
VOYAGER
THE VOYAGER
BY VISUALTEK
SIZE
FOCUS
IMAGE REVERSAL
LINE MARKER
BRIGHTNESS
CONTRAST
LIGHTS
POWER

Photograph courtesy of
Visualtek

VOYAGER

DEVELOPER

Visualtek
1610 26th Street
Santa Monica, CA 90404
(213) 829-6841

CONTACT PERSON

Hank Cunningham
1920 E. 87th Street
Bloomington, MN 55420

or Marc Stenzel
Visualtek
(213) 829-6841

WHERE IT IS USED

Reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

States of California, Ohio, New York, Florida, Maryland, Illinois, Texas, Pennsylvania

REGULATORY APPROVAL

approval pending

WARRANTY PROVIDED

yes

FOR SALE

Visualtek
1610 26th Street
Santa Monica, CA 90404

HOW IT WORKS

This is a portable zoom-lens reading system which has a large screen with a 12" diagonal CRT providing 3x to 45x magnification. The control knobs, tactually different, are on the front panel. The system features a preset aperture allowing instant setting of the optimum lens opening which can also be manually changed. This unit has typewriter capabilities. A swivel mirror doubles as a built-in lens cover when Voyager is not in use. The user can adjust the image to be black on white or white on black. Support legs recess inside the unit for ease in travel.

(Information based on Visualtek literature.)

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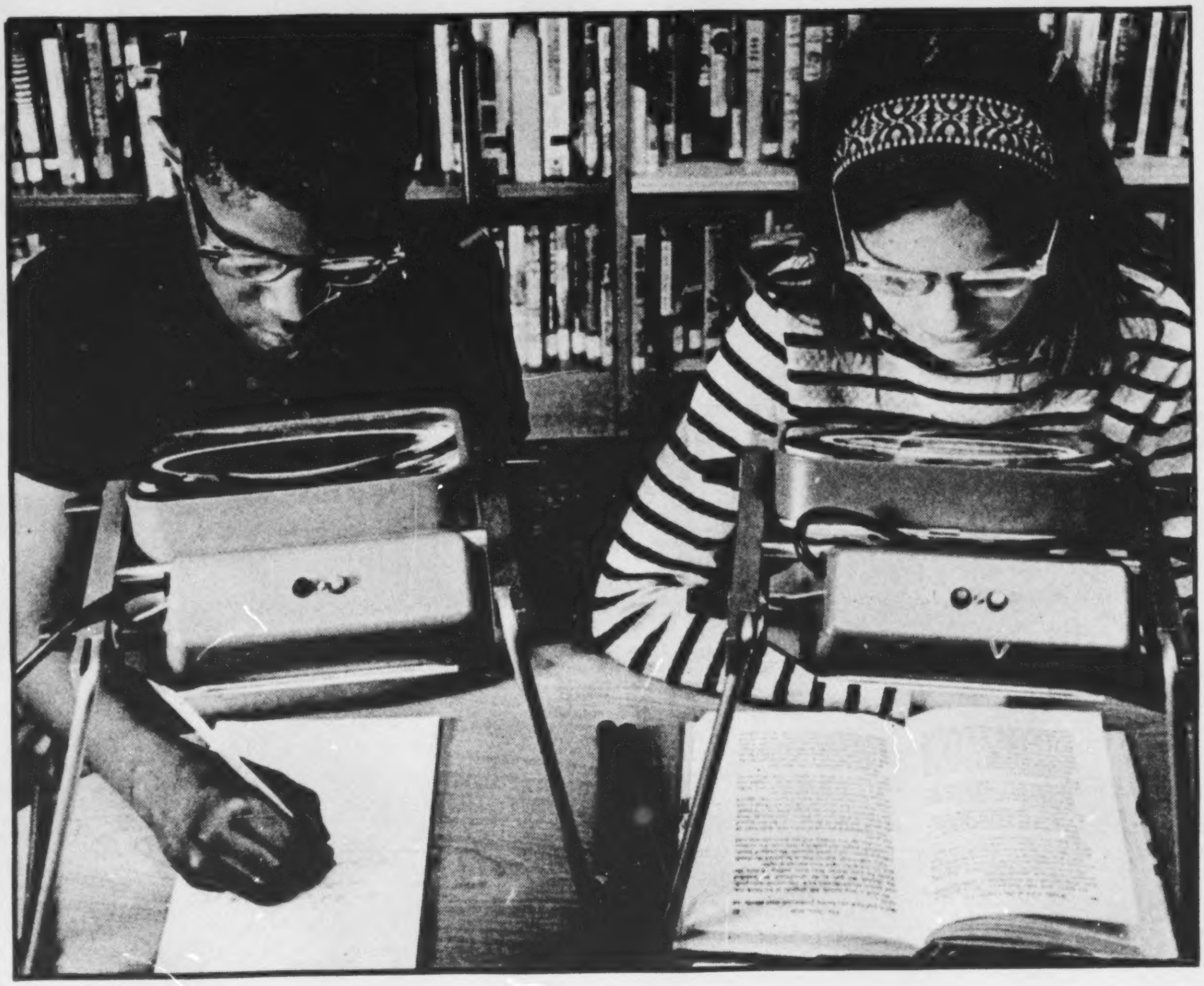
VS1 MASTERLENS SYSTEMS



Photograph courtesy of
EdnaLite Corporation

VSi MASTERLENS SYSTEM

DEVELOPER

EdnaLite Corporation
200 N. Water Street
Peekskill, NY 10566
(914) 737-4100

CONTACT PERSON

Corinne Cohen
Manager, Vision Systems Division
EdnaLite Corporation
Peekskill, NY 10566
(914) 737-4100

WHERE IT IS USED

Fine hand work
Reading

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

user satisfaction expressed in letters to EdnaLite

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

EdnaLite Corporation
200 N. Water Street
Peekskill, NY 10566

$197.00 + shipping

HOW IT WORKS

VSi PT is a portable table model optical system made from a homogeneous optical glass measuring 6"x8". It is designed for expansive viewing and working with both eyes open. When the curved side is up, the lens can be used for relaxed reading allowing free head movement. When the flat side is up, the lens can be used to concentrate on a central working area permitting hand manipulation of items under the lens.

(Information based on EdnaLite Corporation borchure.)

RECREATION

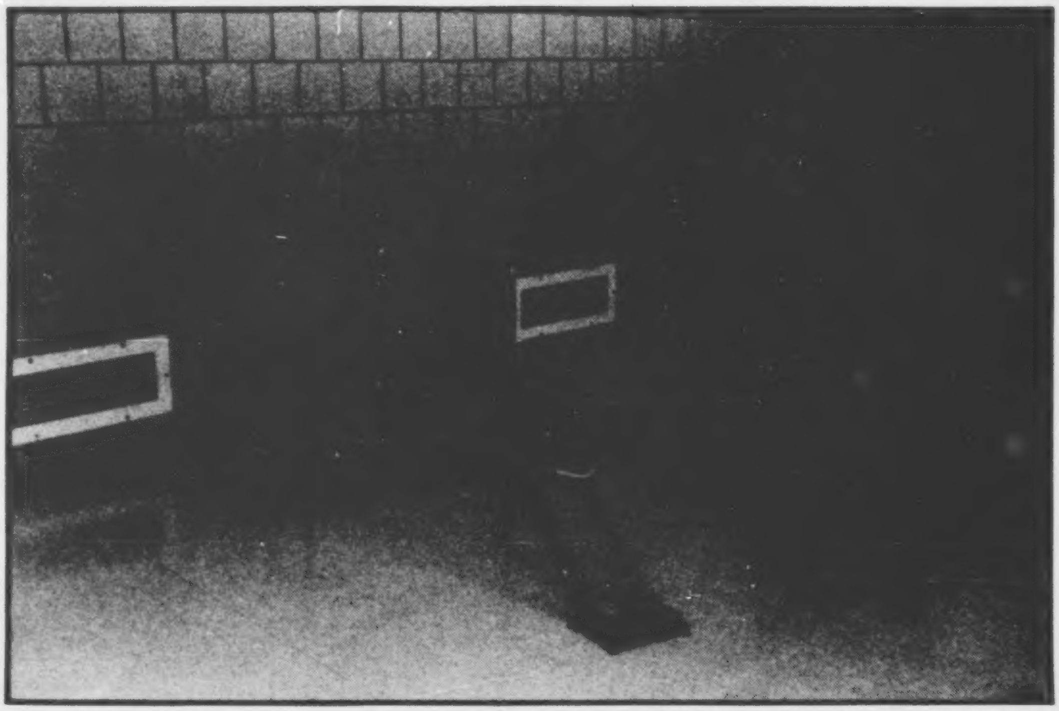
Bowling Ball Guide 590

Card Holder 592

The Game Center 594

Precision Wheelchair Equipment 596

BOWLING BALL GUIDE



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BOWLING BALL GUIDE

DEVELOPER

Dan Golden
CETA Welding Instructor
Wisconsin Indianhead
Technical Institute
New Richmond Campus
1019 South Knowles Ave.
New Richmond, WI 54017
(715) 246-6561

CONTACT PERSON

Dan Golden, WITI
or Ron Zacharski,
Activity Director
St. Croix Health Center
New Richmond, WI 54017
(715) 246-6991

WHERE IT IS USED

Recreation

PROBLEM(S) IT OVERCOMES

inability to perform movements necessary to bowl in traditional manner

FIELD TESTED

yes

located and used by the St. Croix Health Center - New Richmond, WI

REGULATORY APPROVAL

no

WARRANTY PROVIDED

not applicable

FOR SALE

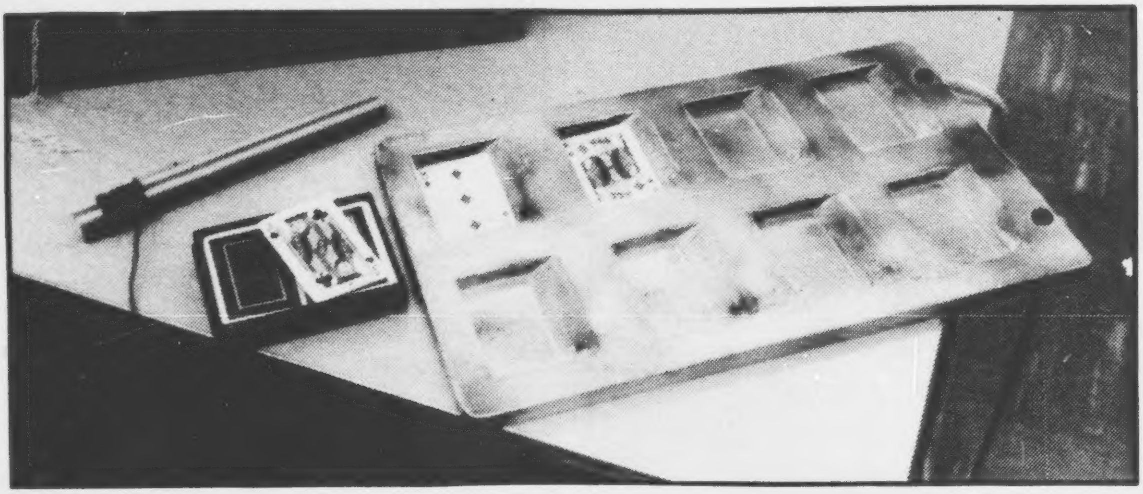
May be made at a minimal cost.

HOW IT WORKS

The guide is positioned at the back of the bowling alley - close to where one would release the bowling ball. The individual using the guide would then roll his or her ball down the decline. It is important that the two parallel rods are the "right" distance apart or the ball will drag.

(Information based on personal interview.)

CARD HOLDER



CARD HOLDER

DEVELOPER

Dave Bates
Northern Wisconsin Center
for the Developmentally
Disabled
Box 340
Chippewa Falls, WI 54729
(715) 723-5542

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Recreation

PROBLEM(S) IT OVERCOMES

organization

FIELD TESTED

yes

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

HOW IT WORKS

The board was designed to assist blind students playing a solitaire game called Cover the Pairs. The braille cards are placed in the individual spaces according to the card game being played. They remain in piles that are reasonably easy to locate.
(The grooved rectangular piece of wood to the left of the card holder, is used to make uniform lengths of yarn when rug hooking.)

(Information based on personal interview.)

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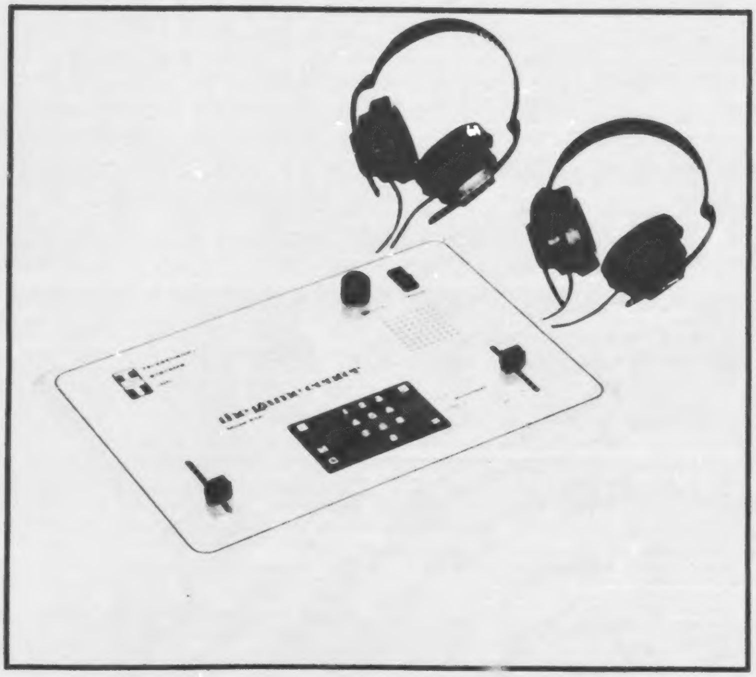
THE GAME CENTER



Photograph courtesy of Telesensory Systems Inc.

THE GAME CENTER

DEVELOPER

Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304
(415) 493-2626

CONTACT PERSON

Gayle Bruglar
Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304
(415) 493-2626

WHERE IT IS USED

Recreation

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not availble

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Telesensory Systems, Inc.
3408 Hillview Avenue
Palo Alto, CA 94304

$995.00

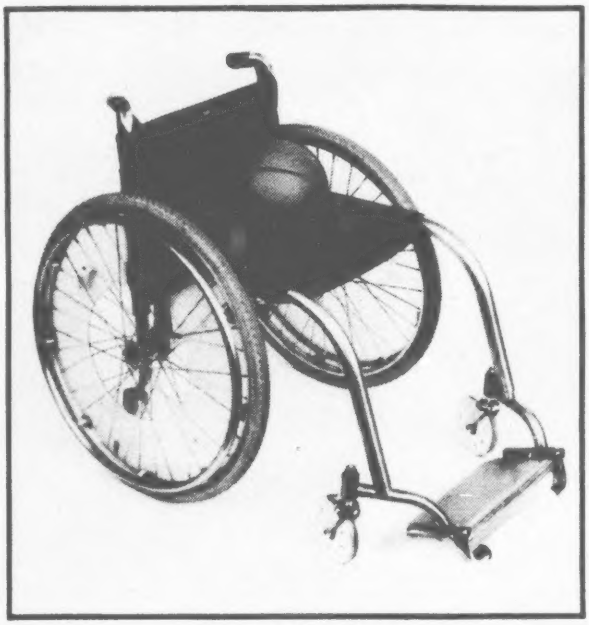
HOW IT WORKS

The Game Center is a series of eight electronic games relying exclusively on auditory cues. It uses a microprocessor to generate electronically synthesized speech and other audible cues that provide all needed game information. The Game Center offers contests of chance, reaction time, memory, strategy and ear-hand coordination.

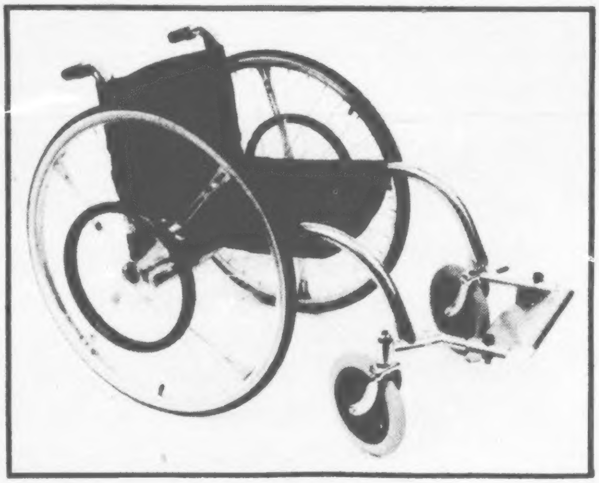
The playing surface of the Game Center is a numerical keyboard arranged in a push-button telephone format, with a series of easy to remember command keys. All of the keys give spoken verification when pressed. A brief initial orientation is all that is needed to play any of the games.

(Information reprinted with permission from Telesensory Systems, Inc. literature.)

PRECISION WHEELCHAIR EQUIPMENT

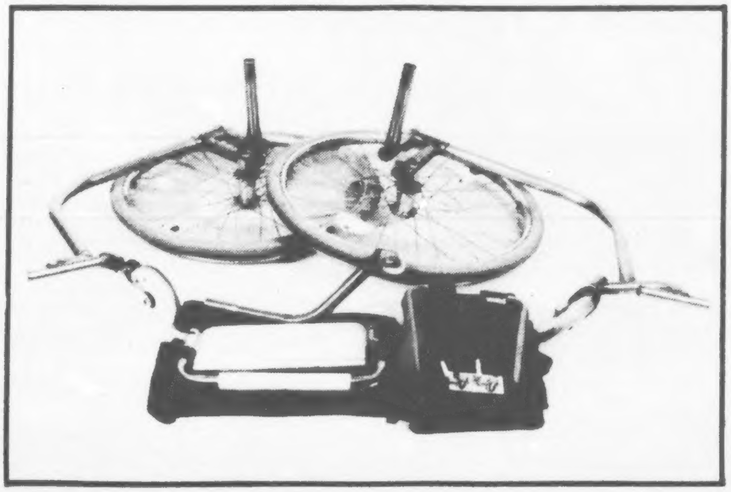


Basketball Chair



Track Chair

Chair in Collapsed Position



Photographs courtesy of
Production Research Corp.

PRECISION WHEELCHAIR EQUIPMENT

DEVELOPER

Production Research Corp.
10217 Southard Drive
Beltsville, MD 20705
(301) 441-2332

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Sports
Wheelchair mobility

PROBLEM(S) IT OVERCOMES

maneuvering a wheelchair

FIELD TESTED

yes

by users in competition and everyday use

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Production Research Corporation
10217 Southard Drive
Beltsville, MD 20705

or call for location of nearest dealer

HOW IT WORKS

Wheelchair parts that are durable, lightweight and compatible with standard wheelchairs, have been designed to improve use of existing wheelchairs. Some parts are made for use in sports. Front caster wheels, 5" and 8" are made of precision sealed bearings for basketball, racing and everyday usage. An 8"x1¼" caster wheel and tire assembly is made of a lightweight, strong plastic, using a sealed bearing and internal spacer unit to minimize play and flutter. The tires are a high pressure type for easy rolling. This is designed for use everyday, in track and in marathons. Some of the basic features of the track and basketball chairs are that they are of lightweight design, (under 30 lbs.), have a single piece footplate, built-in cambered rear wheels for easy pushing and quick turning, a take-apart and collapsing system which gives the user portability and a seat set at a tilt with adjustable sitting positions.

(Information based on Production Research Corporation literature.)

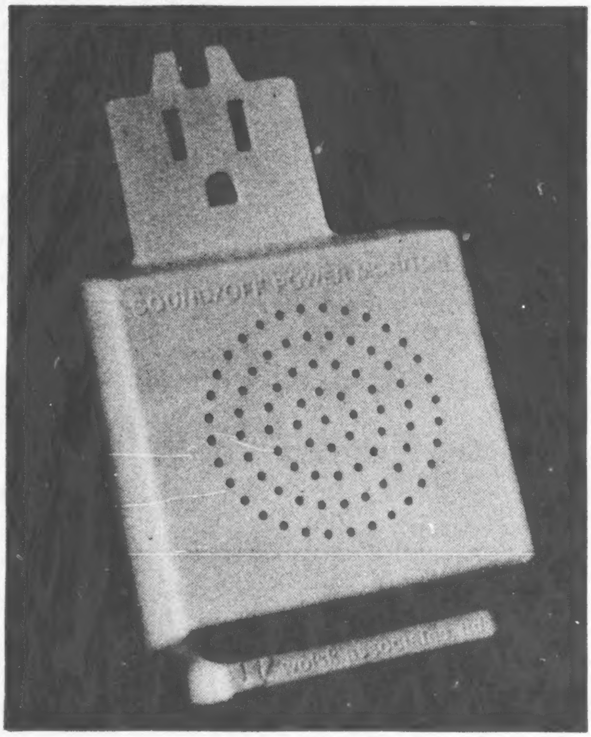
SAFETY

Alarms and Buzzers 600

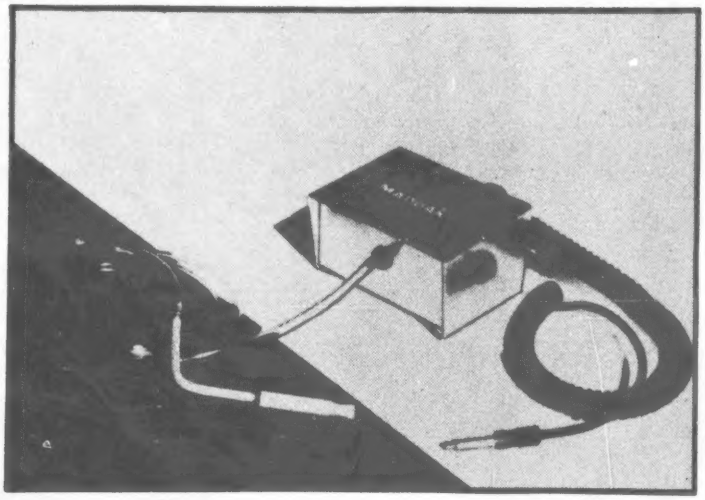
Vibrating Pager 602

Visual Security Alarm System 604

Visual Smoke Detectors 606



The Sound/Off Alarm



Photographs courtesy of
Maddak, Inc.

The Puff'n Buzzer

ALARMS AND BUZZERS

DEVELOPER

Manufactured by:
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

CONTACT PERSON

Fred M. Joslyn
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

WHERE IT IS USED

Communication
Safety

PROBLEM(S) IT OVERCOMES

alerting someone of danger or that help is needed

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc.
Pequannock, NJ 07440

Sound/Off Alarm	$48.00
Puff'n Buzzer	$60.00

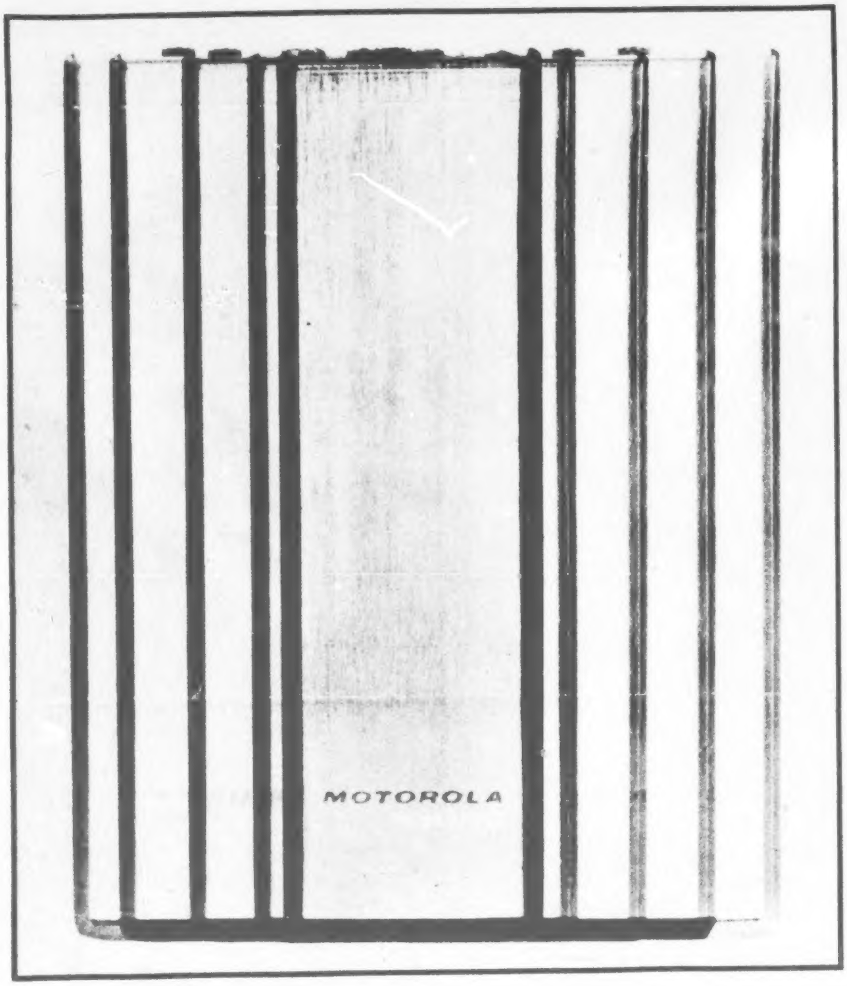
HOW IT WORKS

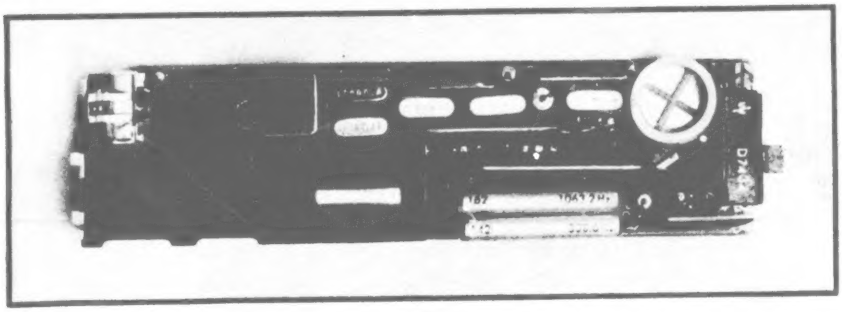
The Sound/Off Alarm is a safety must in monitoring critical life support equipment such as respirators and oxygen generators. It is also useful in alerting staff of power failure in testing and monitoring equipment. The audible alarm (85 dB) blares twice per second for up to 500 hours. It can be used with any piece of electrical equipment by simply plugging alarm into wall socket and plugging equipment into alarm. The Puff'n Buzzer is a breath operated call signal which replaces the customary push button signal used to call a nurse or attendant. A standard telephone-type plug-in-jack terminates a coiled retractile cord which connects to an aluminum housing. The housing contains a breath operated switch which the operator actuates by puffing into a small mouthpiece connected by tubing to the breath switch.

(Information based on Maddak Catalog No. 479, 1979.)

575

VIBRATING PAGER





Photographs courtesy of
Motorola Radio, Inc.

VIBRATING PAGER

DEVELOPER

Motorola Radio, Inc.
1309 E. Algonquin Road
Schaumburg, IL 60196

CONTACT PERSON

R.S. Menchel
NCED/NTID
One Lomb Memorial Drive
Rochester, NY 14623
(716) 475-6544 (TTY or Voice)

WHERE IT IS USED

Communicating
Safety

PROBLEM(S) IT OVERCOMES

communicating with someone who is deaf

HOW IT WORKS

This pager is clipped to the belt or another article of clothing. It is used to inform a deaf person working alone in a laboratory that evacuation of building is required. The person is notified through security by sending radio wave to pager. Strong vibration is felt by wearer.

(Information provided by R.S. Menchel and Max Bentley.)

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

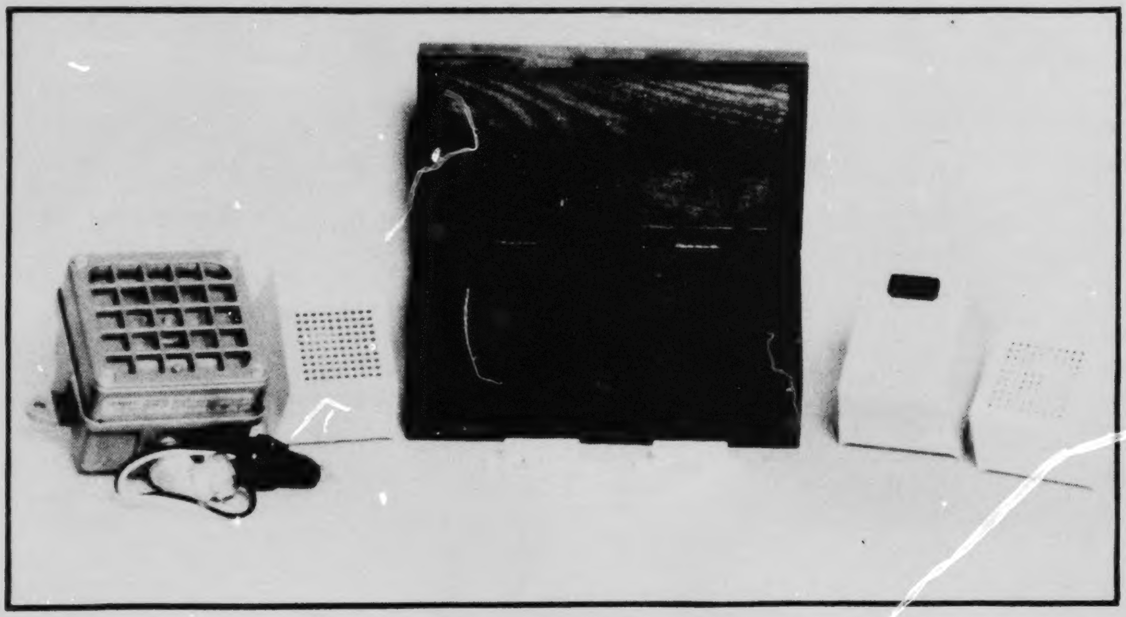
yes

FOR SALE

your local Motorola Radio, Inc. dealer

$400
$15.20 monthly rental fee + charger

VISUAL SECURITY ALARM SYSTEM



578

Photograph courtesy of
Howard M. Haines

VISUAL SECURITY ALARM SYSTEM

DEVELOPER

Nationwide Flashing
Signals System
P.O. Box 6146
Silver Spring, MD 20906
(301) 593-2755

CONTACT PERSON

Howard M. Haines
Nationwide Flashing
Signals System
P.O. Box 6146
Silver Spring, MD 20906
(301) 593-2755 (voice)
(301) 593-2566 (TTY)

WHERE IT IS USED

Home Economics
Homemaking
Manufacturing
Safety

PROBLEM(S) IT OVERCOMES

security hazard posed by inability to hear suspicious noises

FIELD TESTED

yes

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

Nationwide Flashing Signals System
P.O. Box 6146
Silver Spring, MD 20906

complete set $325.00

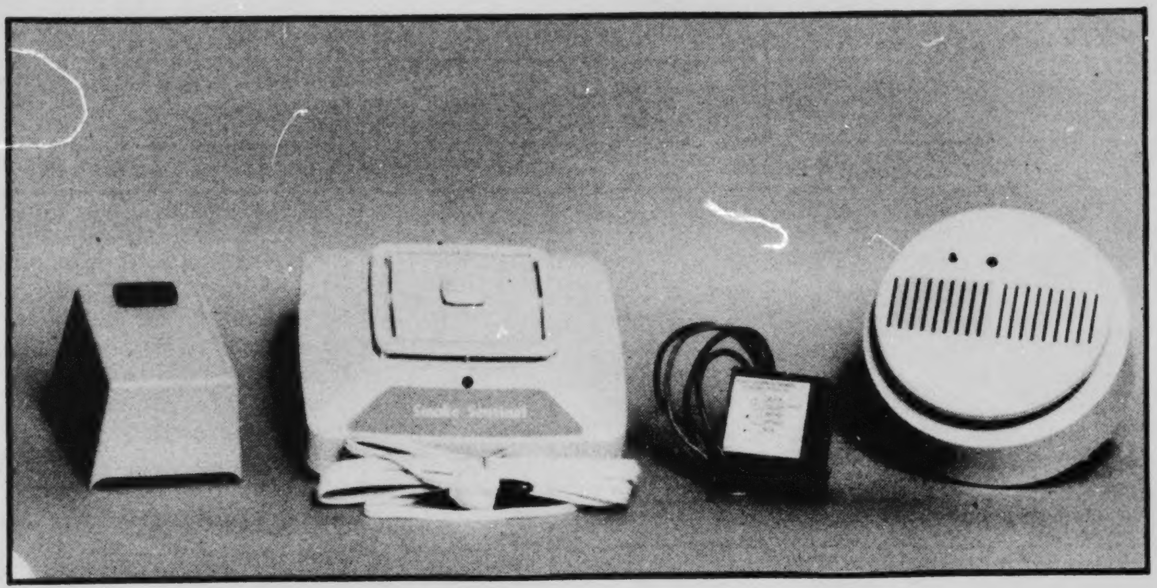
HOW IT WORKS

The Magnetic Switch Set is mounted on parting edge of window or door and is wired to the transmitter, which is plugged into nearest electrical outlet. Several Switch Sets may be used on one transmitter. Transmitter sends a violation signal to control center when protected door or window has been opened. If the Control Center has been turned on, it locks on to the signal from the Transmitter, waits 10-15 seconds, and then transmits an alarm signal to trigger all alarms. This happens even if the door has been quickly closed. The delay gives the homeowner time to disarm the Control Center before the alarms sound. Other features include:

- A 30-60 Second Exit Delay during which time the Control Center ignores all violations. This allows homeowner to exit without triggering alarms.
- An In/Out Switch for deleting the exit and reentry delays so that all the alarms will sound immediately upon the opening of a secured door or window.
- A Violation Light that comes on whenever a protected opening is not closed. It warns against arming the system before the building is secured.
- An Automatic Reset feature whereby the system will rearm itself if the door or window violated is subsequently closed.

(Information based on Nationwide Flashing Signals System literature.)

VISUAL SMOKE DETECTORS


Smoke Sentinel

Photograph courtesy of
Howard M. Haines

VISUAL SMOKE DETECTORS

DEVELOPER

Nationwide Flashing
Signals System
P.O. Box 6146
Silver Spring, MD 20906
(301) 593-2755

CONTACT PERSON

Howard M. Haines
Nationwide Flashing
Signals System
P.O. Box 6146
Silver Spring, MD 20906
(301) 593-2755 (voice)
(301) 593-2566 (TTY)

WHERE IT IS USED

Home Economics
Homemaking
Manufacturing
Safety

PROBLEM(S) IT OVERCOMES

inability of a hearing impaired or deaf person to hear an auditory smoke alarm

FIELD TESTED

yes

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

Nationwide Flashing Signals System
P.O. Box 6146
Silver Spring, MD 20906

$47.50 - $95.00

HOW IT WORKS

These smoke detectors are photoelectric.

Switched Receptacle

- Plugs into household receptacle (120 volt AC)
- Power is applied to outlet during alarm.
- Lights are plugged into this receiver (up to 300 watts).
- Intended for installation in bedroom.
- Can be moved from room to room.

Smoke Detector Transmitter

- Plugs into household receptacle (120 volt AC).
- Detects dangerous levels of smoke.
- Sounds loud penetrating alarm.
- Transmits continuous signal to receiver-alarm.
- Automatically resets (alarm ceases when smoke clears).
- Use as many detector transmitters as necessary to protect your home.

Horn (not shown in photo)

- Plugs into household receptacle (120 volt AC).
- Sounds a loud alarm (85db at 10 ft.)
- Intended for installation in your neighbor's house to alert him while you are away or on vacation.
- Can be moved from room to room.

(Information based on Nationwide Flashing Signals System literature.)

SEWING

Bernina Sewing Machine 610

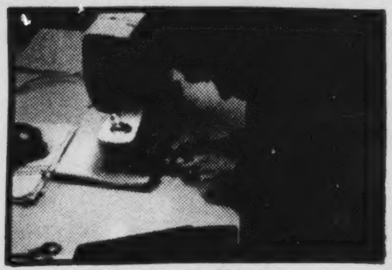
Magnifier for Sewing Machine 612

Sewing Machine, Chest Operated 614

Sewing Machine Puff and Sip Control System for Paraplegic 616

Viking Sewing Machine 618

BERNINA SEWING MACHINE

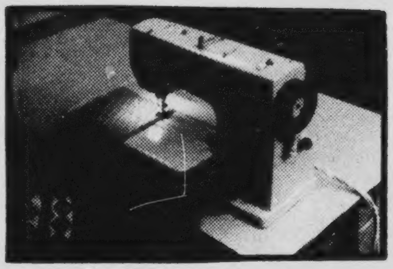


Bobbin Holder

Handwheel Key

Needle Finger-Guard

Dials



Presser-Foot Lifter

Speed Regulator

Photographs courtesy of Fritz Gegauf Limited

BERNINA SEWING MACHINE

DEVELOPER

Fritz Gegauf Limited
Seestrasse
8266 Steckborn
Switzerland
(054) 8 29 21

CONTACT PERSON

Hans Boller
Fritz Gegauf Limited
Seestrasse
8266 Steckborn
Switzerland
(054) 8 29 21

WHERE IT IS USED

Sewing

PROBLEM(S) IT OVERCOMES

difficulty operating standard sewing machine due to visual impairment, hand or foot strength

FIELD TESTED

yes
Sweden & Switzerland

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

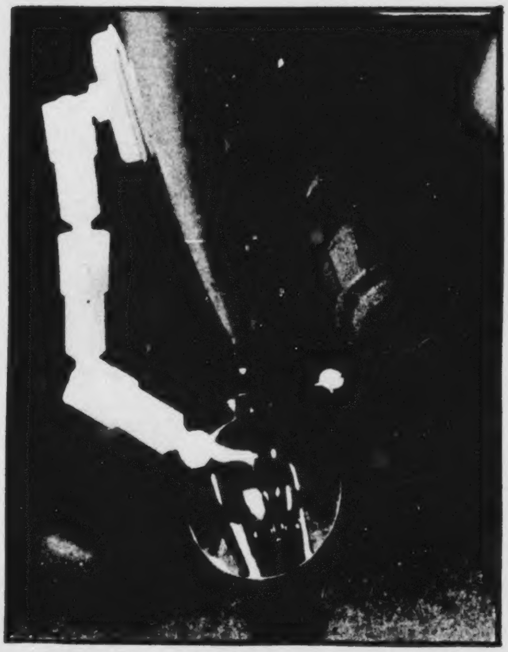
See importers list in appendix.
Priced at retail dealers' discretion.

HOW IT WORKS

Model 830H has several features to allow easier operation of the machine. A holder can be used to remove and insert the bobbin and the bobbin hook is non-jamming. Turning a lever with one hand locks the handwheel; by applying light pressure to a large key, it can be released and retightened. Using a centering block places the needle in the correct position. A large handled screwdriver is used on the needle holder screw. A finger-guard on the needle is available. Threading of the machine can be done with one hand putting the thread through the slots; no eyes have to be threaded. A needle with a slot to the eye is an available accessary. Width, length, needle position and buttonhole dials are a non-slip design which rotate by pushing the large knob projections. Markings for width and length can be felt. A knob with large projections is used to raise and lower the feed-dog. An elongated lever is used for stitch selection; these markings can also be felt. The presser-foot snaps on and off. An adjustable guide can screw into the back of the presser-foot or base of the machine. The presser-foot is raised and lowered with an elbow or knee operated lever. The sewing speed regulator can be operated by foot, elbow, knee or chin, and a lock can be placed on it limiting it to two speed positions.

(Description based on Bernina literature; verbal explanation provided by Hans Neunschwander, Hans Sewing Center - Madison, WI.)

MAGNIFIER FOR SEWING MACHINE



Photograph courtesy of
American Foundation for
the Blind

585

MAGNIFIER FOR SEWING MACHINE

DEVELOPER

CONTACT PERSON

Alex H. Townsend
American Foundation for
the Blind
15 West 16th Street
New York, NY 10011
(212) 620-2169

WHERE IT IS USED

Sewing

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by panels of blind and visually impaired persons

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

American Foundation for the Blind
15 West 16th Street
New York, NY 10011

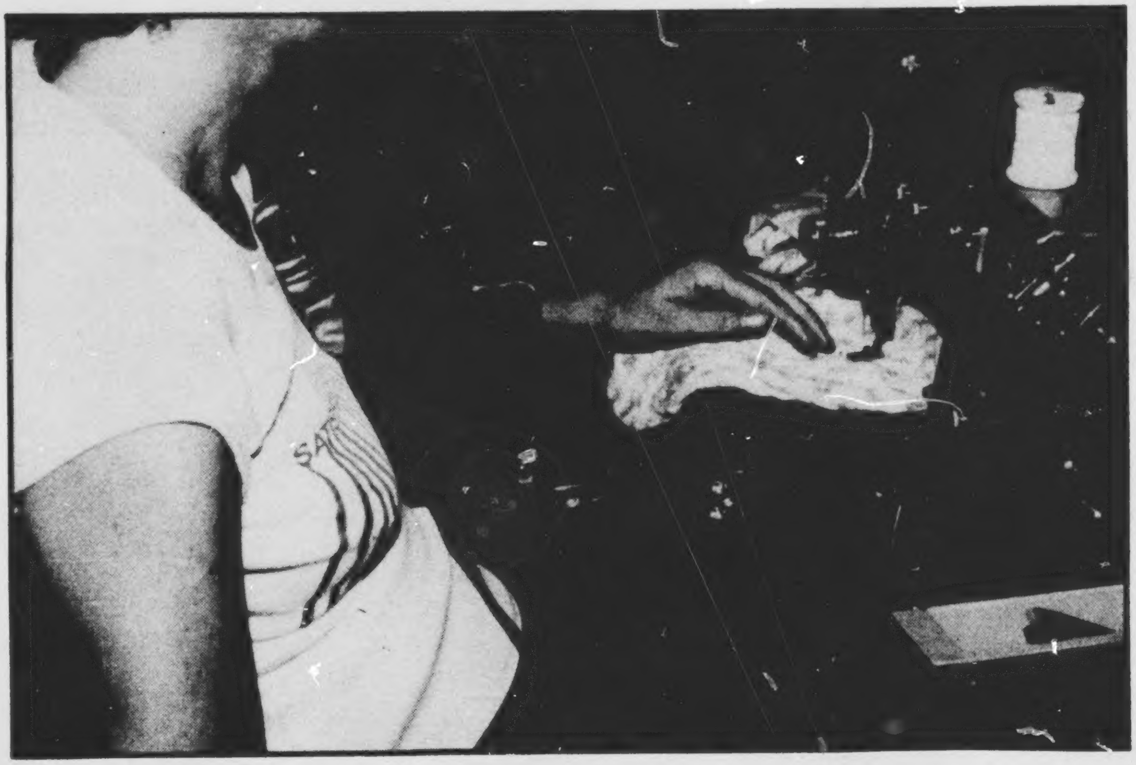
$2.75

HOW IT WORKS

This flexible plastic device attaches to the side of a sewing machine to help guide the thread into the needle.

(Information based on American Foundation for the Blind literature.)

SEWING MACHINE, CHEST OPERATED



Photograph courtesy of
David F. Law, Jr.

587

SEWING MACHINE, CHEST OPERATED

DEVELOPER

David F. Law, Jr.
Woodrow Wilson Rehab. Ctr.
Rehabilitation Engineering Department
Fishersville, VA 22939
(703) 885-9724

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Sewing

PROBLEM(S) IT OVERCOMES

inability to operate a sewing machine well enough to be employed

HOW IT WORKS

The variable speed control of a commercially available sewing machine was mounted at chest level of the operator. This allows "hands-free" operation and very good control. Mounting arm is removable to allow normal usage.

(Information provided by David F. Law, Jr.)

FIELD TESTED

yes

Woodrow Wilson Rehabilitation Center

REGULATORY APPROVAL

no

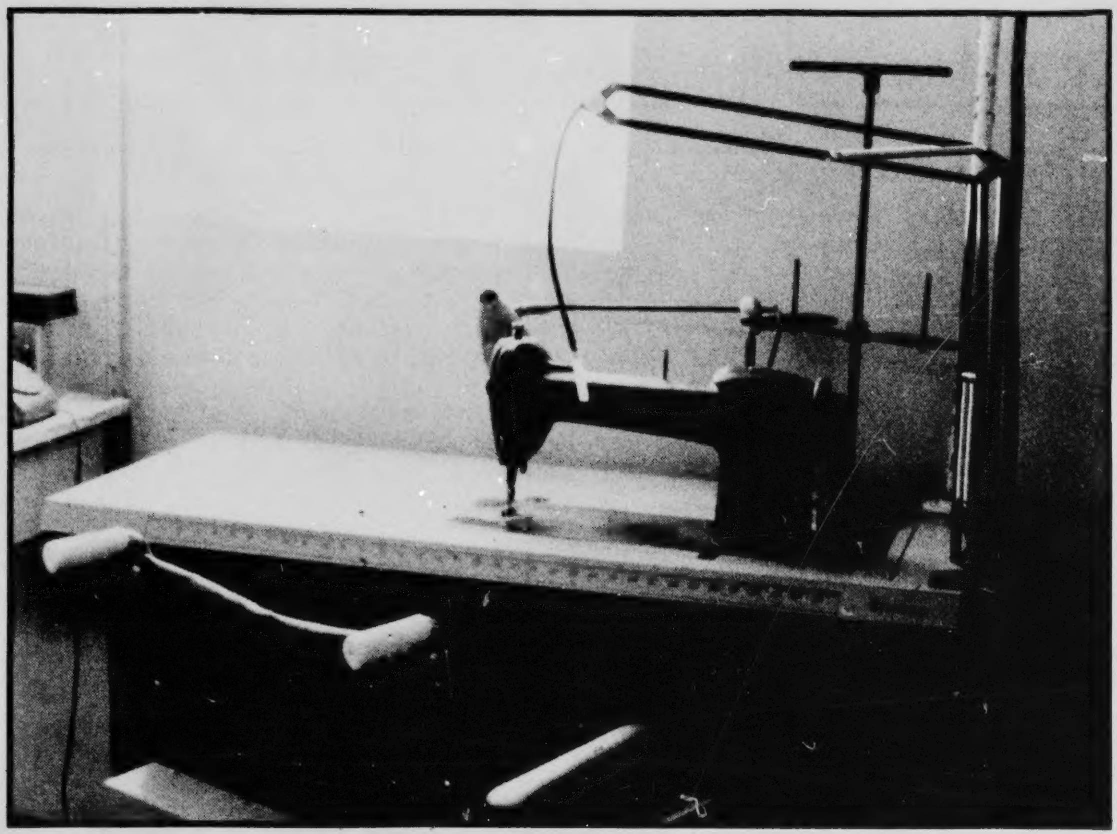
WARRANTY PROVIDED

no

FOR SALE

no

SEWING MACHINE PUFF AND SIP CONTROL SYSTEM FOR PARAPLEGIC



Photograph courtesy of Don
Warren and Ricardo Cerna

589

SEWING MACHINE PUFF AND SIP CONTROL SYSTEM FOR PARAPLEGIC

DEVELOPER

Clinical Convenience Products
Contracting Serv. Div.
2070 Helena Street
Madison, WI 53704
(608) 251-2882

CONTACT PERSON

Don Warren
2070 Helena Street
Madison, WI 53704
(608) 251-2882

WHERE IT IS USED

Benchwork
Home Economics
Homemaking
Sewing

PROBLEM(S) IT OVERCOMES

unable to operate foot control of an industrial sewing machine.

FIELD TESTED

yes

North Central Technical Institute - Wausau, WI

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Clinical Convenience Products
2070 Helena Street
Madison, WI 53704

$600 - custom modifications upon request

HOW IT WORKS

The foot control of an industrial sewing machine was modified with a puff and sip control that provides linear speed control; i.e., the harder the person puffs on the tube the faster the sewing machine will run.
When the individual sips on the tube the presser foot rises. Once desired speed is achieved by puffing, speed is maintained by blocking tube with the tip of the tongue. (Does not require constant puff to keep machine running.)

(Information provided by Ricardo Cerna, Rehabilitation Engineering Specialist, Wisconsin Division of Vocational Rehabilitation, and Don Warren.)

VIKING SEWING MACHINE

Photograph not available

591

VIKING SEWING MACHINE

DEVELOPER

Husqvarna AB
Fack
S-561 81 Husqvarna
SWEDEN

CONTACT PERSON

WHERE IT IS USED

Sewing

PROBLEM(S) IT OVERCOMES

difficulty operating standard sewing machine due to visual impairment and physical strength

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Viking Sewing Machine dealers

HOW IT WORKS

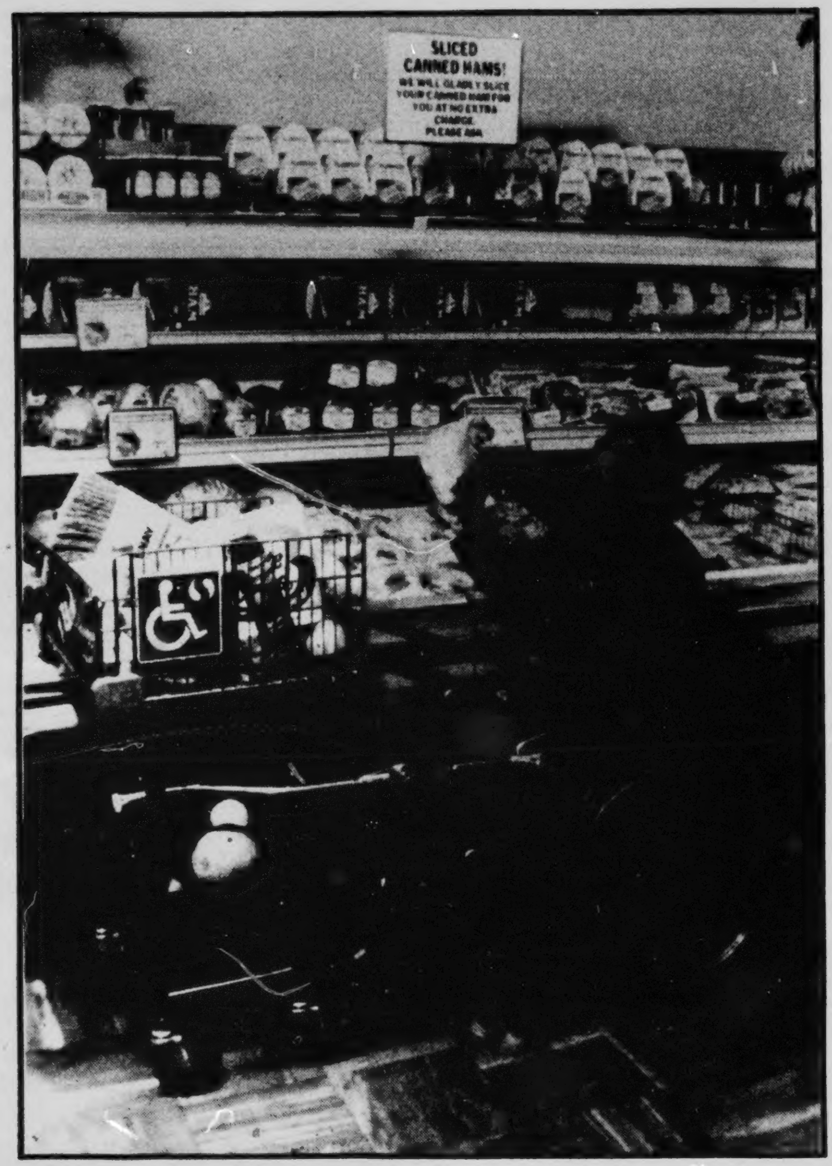
Several features make operation of the machine easier. A cassette and braille summary of the instruction book are available. Threading of the machine is done following open guides. The needle is slotted and enclosed by a finger guard. The thread tension knob has a rubber ring to make gripping easier. Notches in the presser foot and the needle plate groove are used to locate the needle. A large knobbed screwdriver is used on the needle holder screw. A lever on the presser foot pressure adjustment knob, makes it easier to alter the pressure settings when needed. The different settings are labeled with raised markings. The presser feet can be clipped on and off. The nonjam shuttle has a projecting finger grip on the door. Tongs are used to remove and insert the bobbin. Stitch selection dials have protruding levers for easy turning, are color coded to the stitch indicator and have braille symbols. The reverse button can be pressed with the finger, thumb or palm. A convex knob for the feed dog button can be operated with one finger. A rubber ring around the hand wheel eases gripping and turning. A protruding gear shift lever makes it easy to engage the slow speed gear. When the bobbin is placed on the gear shift spindle, the needle mechanism automatically disengages. The sewing speed control pedal is large and has a heel rest. Controls that can be knee, hand, or arm operated are also available.

(Information based on Viking brochure.)

SHOPPING

Grocery Shopping Cart 622

GROCERY SHOPPING CART


SLICED
CANNED HAMS!
WE WILL GLADLY SLICE
YOUR CANNED HAM FOR
YOU AT NO EXTRA
CHARGE.
PLEASE ASK

Photograph courtesy of
Safeway Stores, Inc.

GROCERY SHOPPING CART

DEVELOPER

Kermit Berge
c/o Mel McCall
Safeway Stores, Inc.
4990 Stockton Blvd.
Sacramento, CA 95820

CONTACT PERSON

Felicia del Campo
Safeway Stores, Inc.
Oakland, CA 94660

WHERE IT IS USED

Shopping

PROBLEM(S) IT OVERCOMES

unable to use a conventional shopping cart from a wheelchair

FIELD TESTED

yes

Safeway stores - Washington, D.C.

REGULATORY APPROVAL

WARRANTY PROVIDED

FOR SALE

Not for sale until mid 1981.

HOW IT WORKS

The cart hooks to a wheelchair freeing the user's hands. On the left rear side of the cart is a telescoping arm that folds down. On the end of the arm is a "U" shaped piece that fits to the bar on the rear of the wheelchair armrest. Another "U" shaped piece then slides forward to fit the front armrest brace and locks into place. The cart will stay directly in front of the wheelchair rolling along with it on four swivel wheels. Once the user is familiar with its use, it takes only a few seconds to hook up.

(Information provided by Kermit Berge and Felicia del Campo, Safeway Stores, Inc.)

TRANSPORTATION

Car Controls 626

Driving Controls 628

Left Foot Gas Pedal Control for Car . . 630

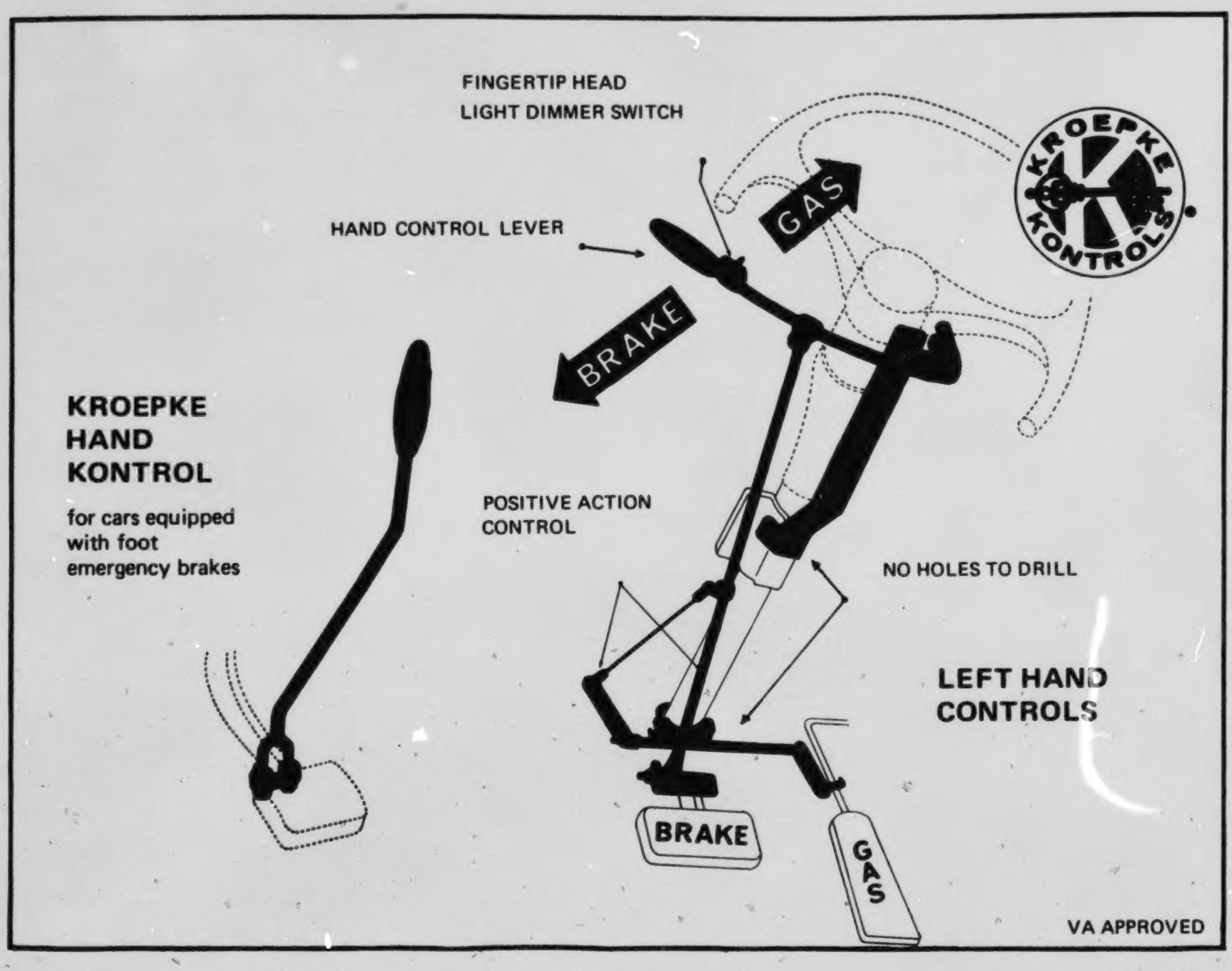

FINGERTIP HEAD
LIGHT DIMMER SWITCH
GAS
KROEPKE KONTROLS
HAND CONTROL LEVER
BRAKE
KROEPKE HAND KONTROL
for cars equipped with foot emergency brakes
POSITIVE ACTION CONTROL
NO HOLES TO DRILL
LEFT HAND CONTROLS
BRAKE
GAS
VA APPROVED

Diagram courtesy of Kroepke Kontrols, Inc.

626

CAR CONTROLS

DEVELOPER

Kroepke Kontrols, Inc.
104 Hawkins Street
Bronx, NY 10464

CONTACT PERSON

Walter Kroepke
Kroepke Kontrols, Inc.
104 Hawkins Street
Bronx, New York 10464
(212) 885-1547

WHERE IT IS USED

Transporation

PROBLEM(S) IT OVERCOMES

inability to operate car controls with lower extremities

FIELD TESTED

yes

company has had 27 years of experience manufacturing driving controls

REGULATORY APPROVAL

VA approved

WARRANTY PROVIDED

yes

FOR SALE

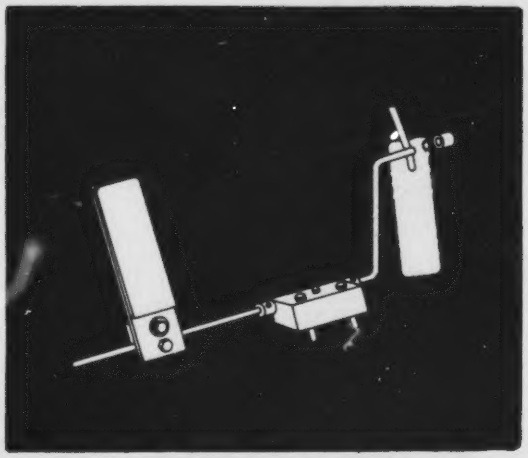
Brake Control	$ 99.50
Single Lever Gas and Brake Control	139.50
Spinner Knob	27.50
Headlight Dimmer Switch	14.50
Hand Parking Brake	15.50

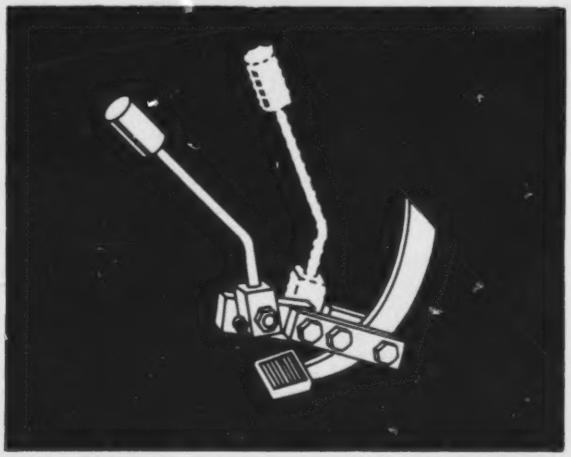
HOW IT WORKS

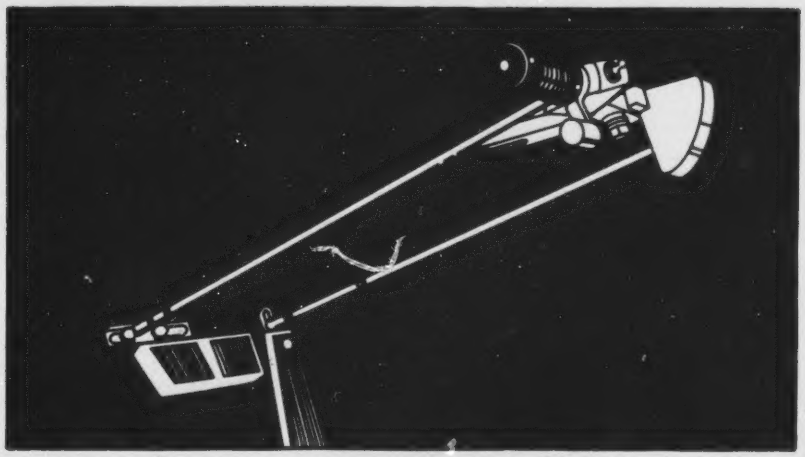
The Brake Control works with a lever action involving the brake only.
The Single Lever Gas and Brake Control involves both the brake and gas operations in one lever.
The Spinner Knob is a ball bearing control for improved control of the steering wheel.
The Headlight Dimmer Switch is a hi-lo, back and forth type motion.
The Hand Parking Brake is for cars with foot control emergency brakes.

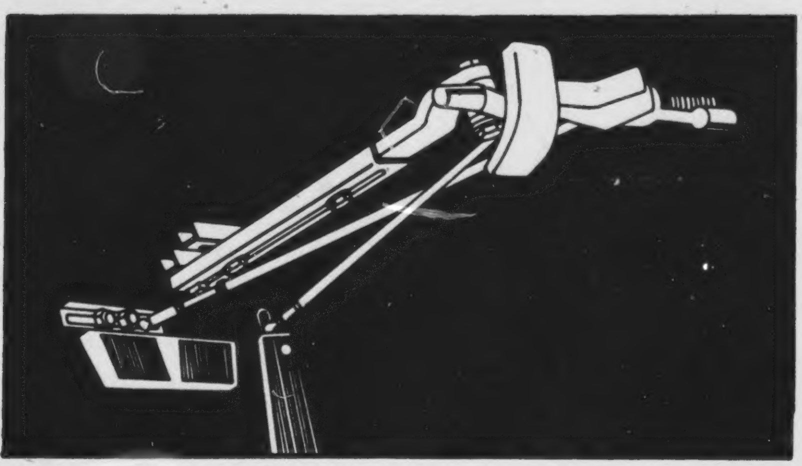
(Information based on company's brochure.)

DRIVING CONTROLS









Illustrations courtesy of
Lehman Drug and Surgical
Supply, Eau Claire, WI and
Wells Engberg, Rockford, IL

DRIVING CONTROLS

DEVELOPER

Wells Engberg
P.O. Box 6388
Rockford, IL 61125
(815) 397-6208

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Transportation

PROBLEM(S) IT OVERCOMES

inability to operate existing car controls

FIELD TESTED

yes

VA

REGULATORY APPROVAL

it meets VA, DVR and DOT Wisconsin standards

WARRANTY PROVIDED

yes

FOR SALE

Contact Wells Engberg in Illinois for state-wide distributors.

In Wisconsin contact:
Mobility Unlimited
7741 W. National Avenue
P.O. Box 14427
Milwaukee, WI 53214

HOW IT WORKS

The Left-Foot Gas-Feed allows use of the acceleration pedal without use of right leg.

The Parking Brake Handle allows a person with limited leg movement to operate a parking brake. The handle folds forward to permit easy entrance and exit.

The Left and Right Hand Drive Controls allow operation of a vehicle by a person with limited mobility.

(Information based on product brochures.)

LEFT FOOT GAS PEDAL CONTROL FOR CAR

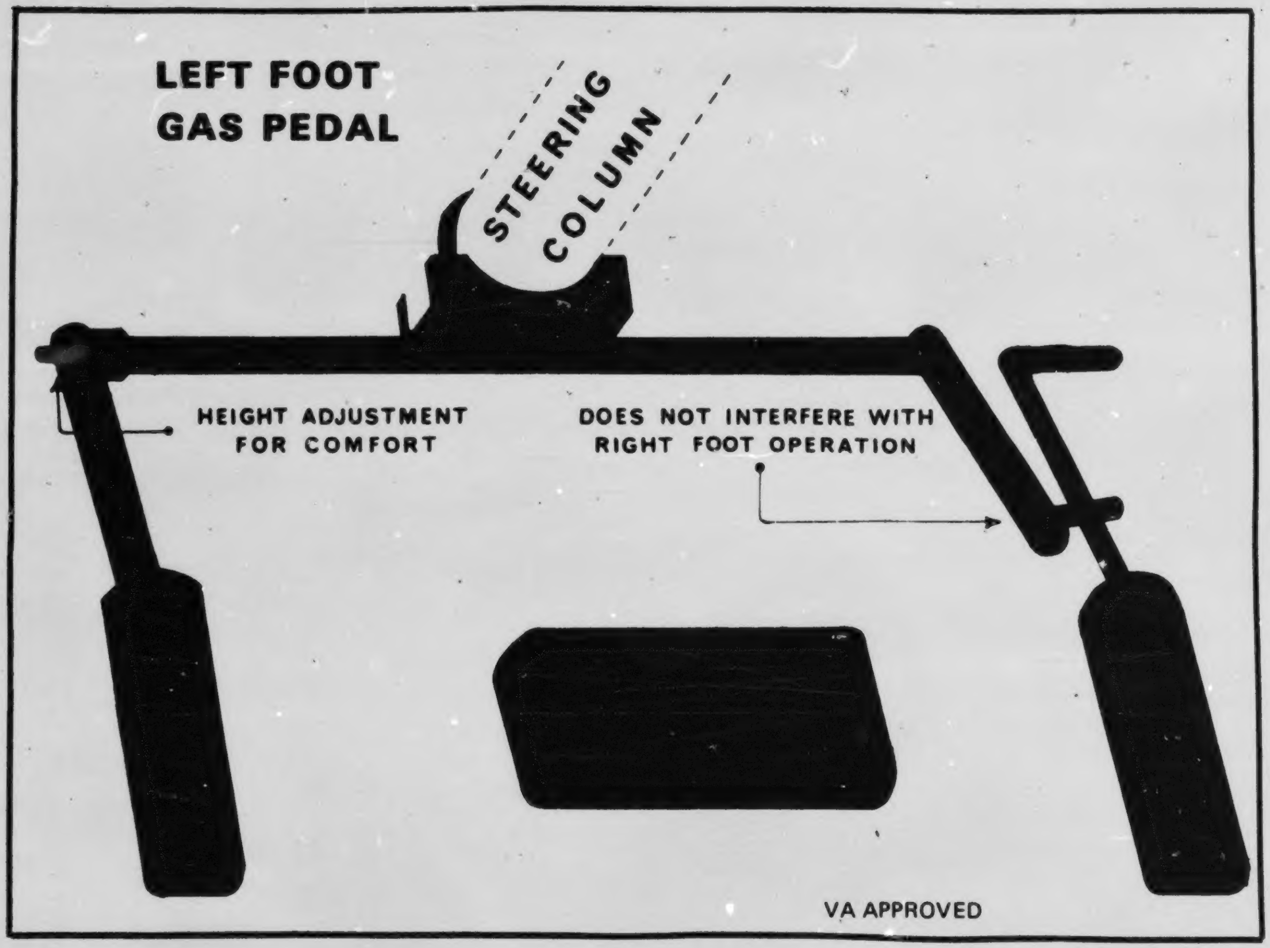

LEFT FOOT
GAS PEDAL
STEERING COLUMN
HEIGHT ADJUSTMENT FOR COMFORT
DOES NOT INTERFERE WITH RIGHT FOOT OPERATION
VA APPROVED

Diagram courtesy of Kroepke Kontrols, Inc.

602

LEFT FOOT GAS PEDAL CONTROL FOR CAR

DEVELOPER

Kroepke Kontrols, Inc.
104 Hawkins Street
Bronx, New York 10464

CONTACT PERSON

Walter Kroepke
Kroepke Kontrols, Inc.
104 Hawkins Street
Bronx, New York 10464
(212) 885-1547

WHERE IT IS USED

Transportation

PROBLEM(S) IT OVERCOMES

inability to use right foot in driving a car

HOW IT WORKS

The left pedal is similar in shape, size, and location on the floor of the car to the right gas pedal. The left gas pedal is attached to a device which applies pressure to the right gas pedal. The device is secured at the steering column.

(Information based on company's brochure)

FIELD TESTED

yes

company has had 27 years of experience manufacturing driving controls

REGULATORY APPROVAL

VA approved

WARRANTY PROVIDED

yes

FOR SALE

left foot gas control - $50.00

604

TYPING

Electric Typewriter 634
IBM Audio Typing Unit 636
Manual and Electric Typewriter . . . 638
Numeric Key Lock 640
Perkins Brailler 642
Reverse Indexing Typewriter 644
Talking Word Processing System . . . 646
Touch-N-Type™ Stick 648
Typewriter Control Systems 650
Typewriter Guard 652
Typewriter Mask Aid 654
Typewriter, One Hand, with Shield . . 656
Typewriter "Shift Easy" Shift Bar . . 658
Typing, One-Handed 660

ELECTRIC TYPEWRITER

Photograph courtesy of Olympia
USA Inc

606

ELECTRIC TYPEWRITER

DEVELOPER

Olympia USA Inc
Route 22
Somerville, NJ 08876
(201) 722-7000

CONTACT PERSON

Michael S. Pahuta
Asst. Manager
Marketing Services
Olympia USA
Route 22
Somerville, NJ 08876
(201) 722-7000

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

limited hand and arm muscle control

FIELD TESTED

information not available

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

Olympia USA Inc
Route 22
Somerville, NJ 08876

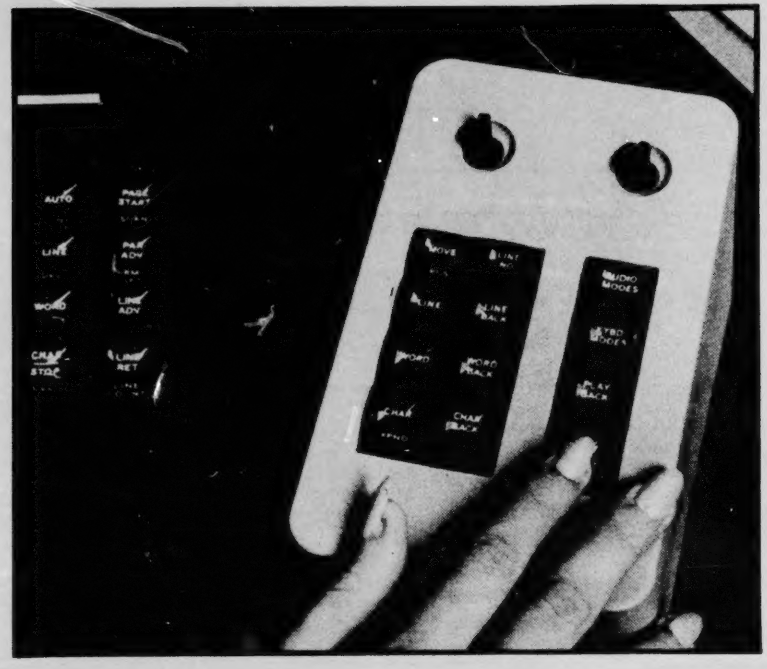
price of Standard Typewriter plus
$250.00

HOW IT WORKS

A standard electric Olympia typewriter is equipped with a continuous feed paper attachment; a paper cutter for separating completed typing from the paper roll; a cushioned arm rest and an elevated keyboard mask for guiding fingers to the proper keys.

(Information based on Olympia literature.)

IBM AUDIO TYPING UNIT


AUTO
PAGE START
LINE
PAR ADV
WORD
LINE ADV
CHAR STOP
LINE RET
MOVE
LINE END
LINE
LINE BACK
WORD
WORD BACK
CHAR
CHAR BACK
AUDIO MODES
KYBD MODES
PLAY BACK

Photographs courtesy of
IBM Corporation

IBM AUDIO TYPING UNIT

DEVELOPER

IBM Corporation
400 Parsons Pond Drive
Franklin Lakes, NJ 07417
(201) 848-1900

CONTACT PERSON

J.G. Cesario
Program Manager
IBM Corporation
400 Parsons Pond Drive
Franklin Lakes, NJ 07417
(201) 848-1900

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

a blind person's inability to proof typed material without assistance from a sighted person

FIELD TESTED

no

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

Local Office
Office Products Division
IBM Corporation

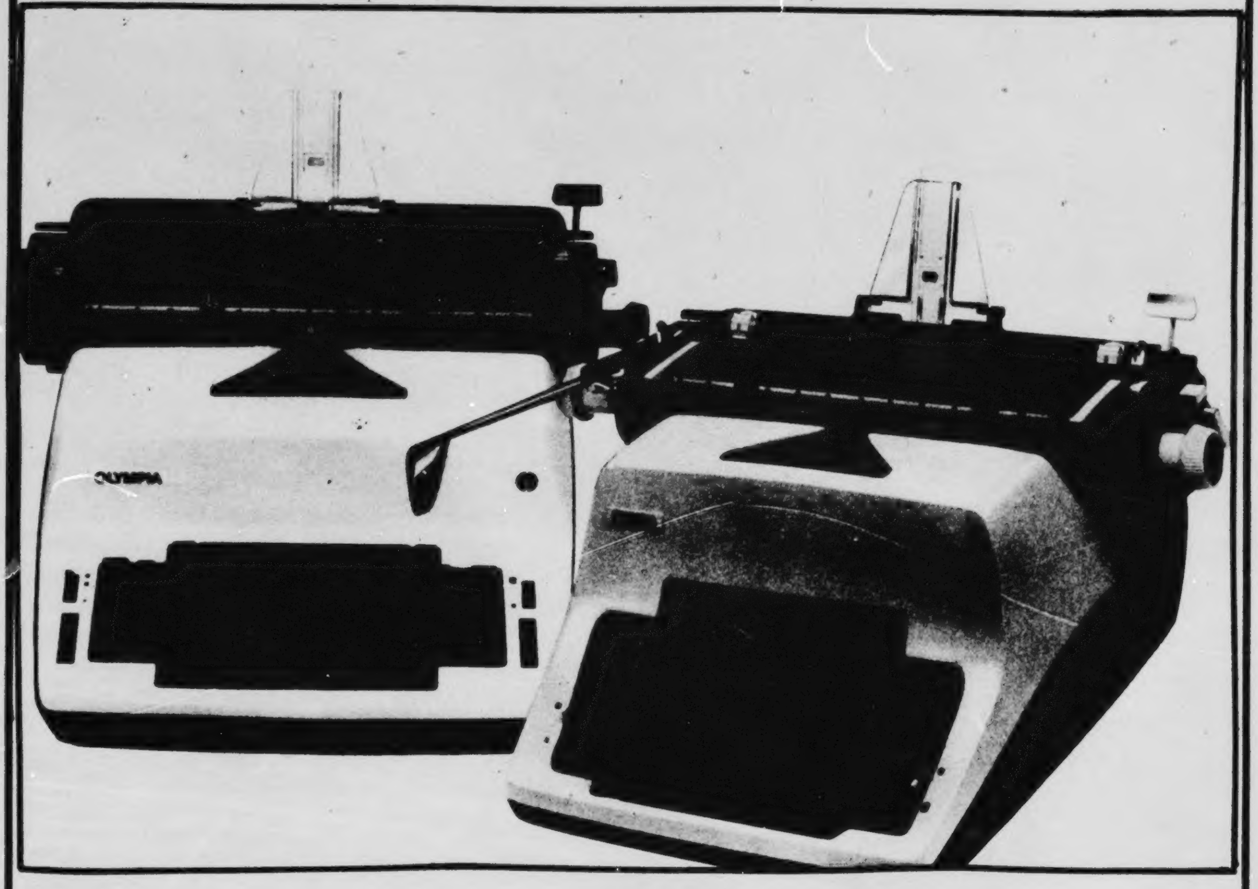
$170/rent; $150/lease; $5300/purchase

HOW IT WORKS

The IBM Audio Typing Unit consists of an audio keypad, an audio console, and an optional headset. To be operational it must be attached to one of four host typewriters: the IBM Mag Card II, the IBM Mag Card/A, the IBM Memory Typewriter, or the IBM Memory 100 Typewriter. The IBM Audio Typing Unit produces synthetic speech with an unlimited vocabulary. The synthetic speech can be heard in character, word, or line modes at operator discretion.

(Information based on IBM Corporation literature.)

MANUAL AND ELECTRIC TYPEWRITER



Photograph courtesy of Olympia
USA Inc

MANUAL AND ELECTRIC TYPEWRITER

DEVELOPER

Olympia USA Inc
Route 22
Somerville, NJ 08876
(201) 722-7000

CONTACT PERSON

Michael S. Pahuta
Asst. Manager
Marketing Services
Olympia USA
Route 22
Somerville, NJ 08876
(201) 722-7000

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

Olympia USA Inc
Route 22
Somerville, NJ 08876

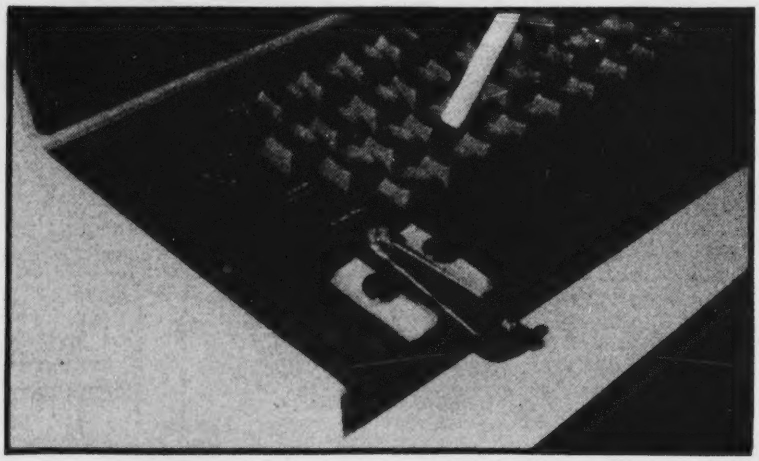
Price of Standard Typewriter plus $57.50

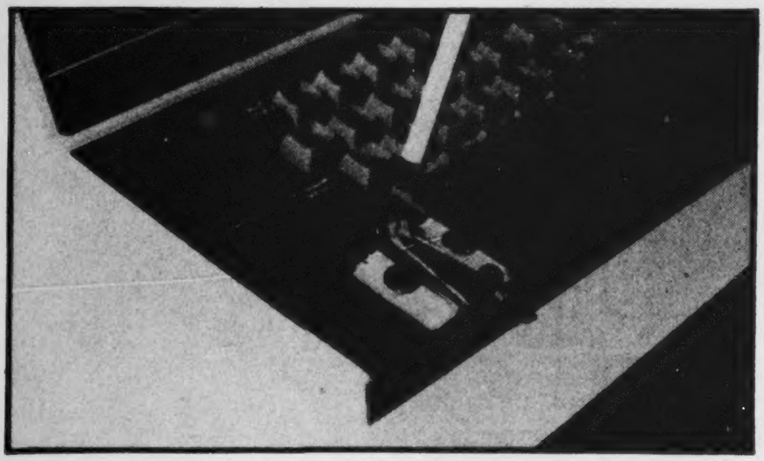
HOW IT WORKS

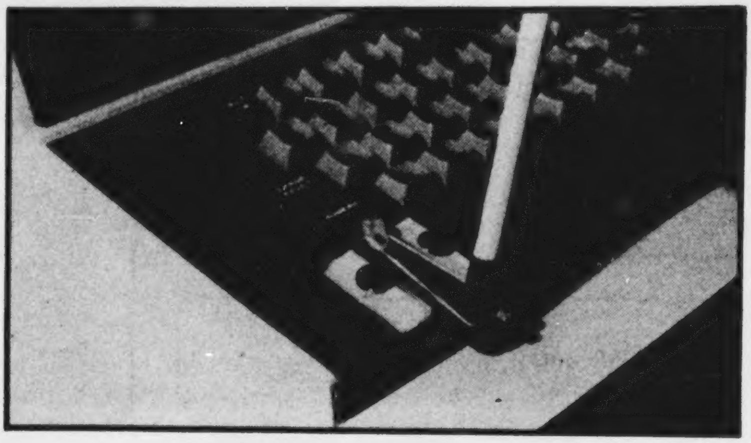
A standard manual or electic Olympia typewriter is equipped with a braille keyboard; left and right braille margins; a braille margin scale and a braille scale on the bail roll shaft.

(Information based on Olympia literature.)

NUMERIC KEY LOCK







Photographs courtesy of
David F. Law, Jr.

612

NUMERIC KEY LOCK

DEVELOPER

Woodrow Wilson Rehab. Ctr.
Rehab. Engineering Dept.
Fishersville, VA 22939
(703) 885-9724

CONTACT PERSON

David F. Law, Jr.
Woodrow Wilson Rehab. Ctr.
Rehab. Engineering Dept.
Fishersville, VA 22939
(703) 885-9724

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

difficulty in manipulating the regular shift key lock of a typewriter

HOW IT WORKS

I.B.M. 29 or 129 key punch machine does not have a shift key lock, so a Plexiglas lock is attached to the machine. It allows quadriplegics using mouthsticks and hemiplegics to type upper case letters.

(Information provided by David F. Law, Jr.)

FIELD TESTED

yes

Woodrow Wilson Rehabilitation Center

REGULATORY APPROVAL

information not available

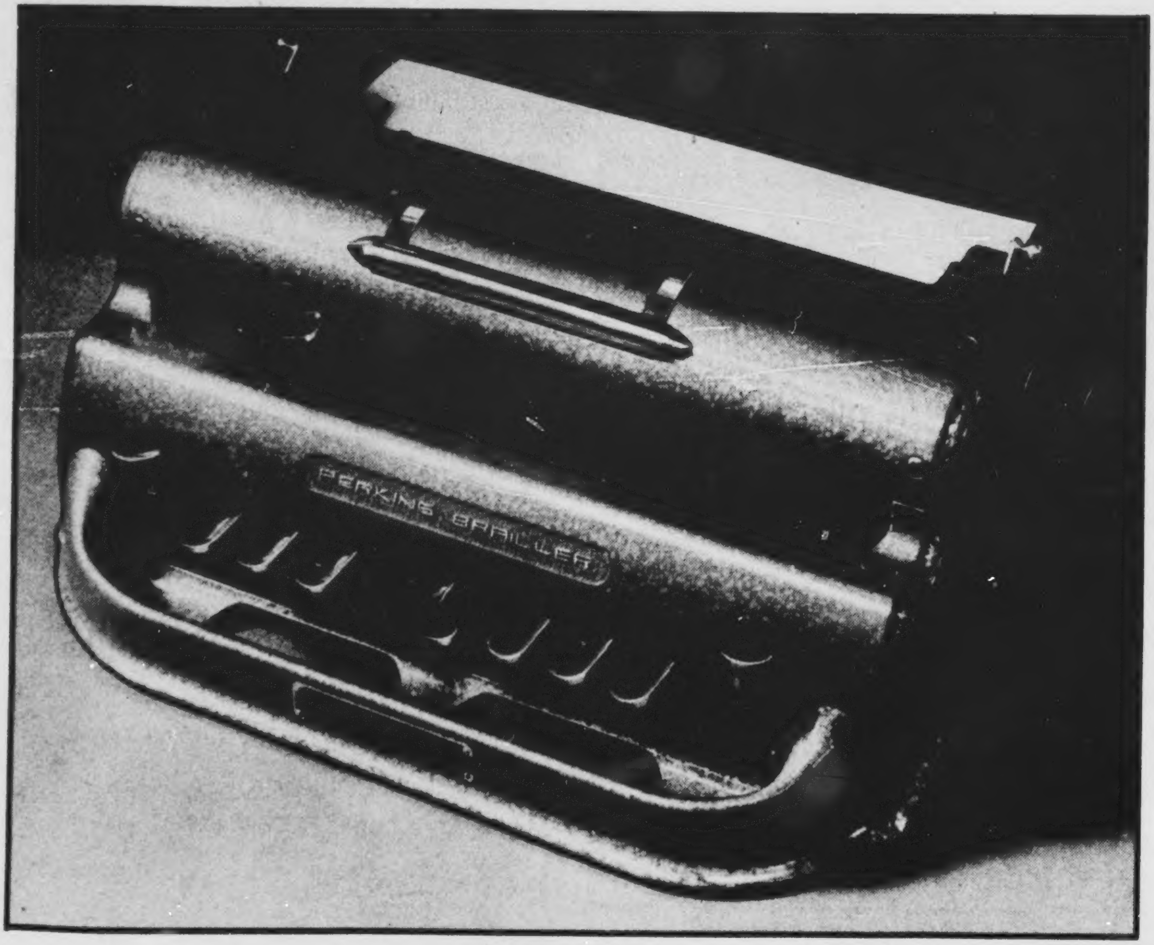
WARRANTY PROVIDED

no

FOR SALE

Rehabilitation Engineering Department
Woodrow Wilson Rehabilitation Center
Fishersville, VA 22939

$15.00



PERKINS BRAILLER

614

Photograph courtesy of Howe Press

PERKINS BRAILLER

DEVELOPER

David Abraham
Manufactured by:
Howe Press of Perkins
School for the Blind
175 N. Beacon Street
Watertown, MA 02172
(617) 924-3490

CONTACT PERSON

Harry J. Friedman
Howe Press of Perkins
School for the Blind
175 N. Beacon Street
Watertown, MA 02172
(617) 924-3490

WHERE IT IS USED

Brailling

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

yes

by users

REGULATORY APPROVAL

UL; Canadian Standard Association
(for electric model)

WARRANTY PROVIDED

yes

FOR SALE

Howe Press of Perkins
School for the Blind
175 N. Beacon Street
Watertown, MA 02172

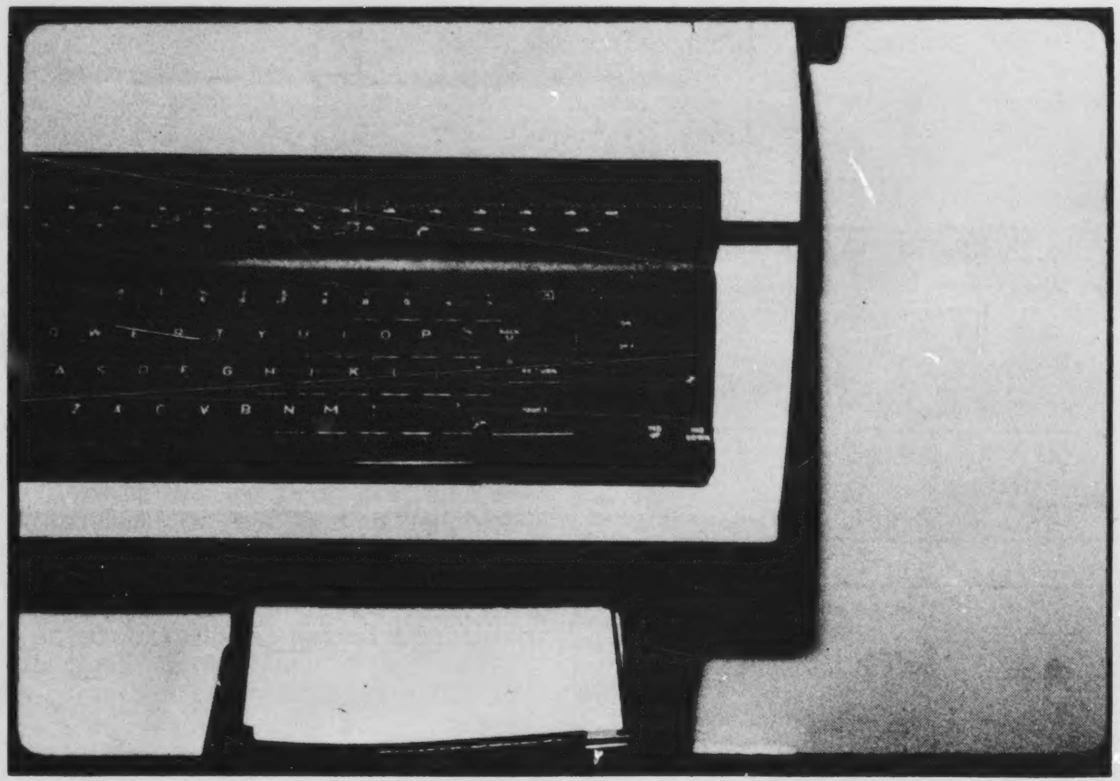
$215.00 manual
$360.00 electric

HOW IT WORKS

User inserts a sheet of heavy paper (measuring up to 11"x11½"), through a slot at the back of the machine. With the six keys the user produces the braille dot code. This model is used widely around the world as the braille code is adaptable to many languages. Various models of the Brailler have been designed to meet special needs of the user. There is a unimanual for persons who can only use one hand and one with straight extension keys for persons needing a mechanical assist due to limited arm strength. For descriptions of other models available contact Howe Press.
Other products available from Howe Press include slates, stylus, measurement and math materials, and Braille-Vision books.

(Information based on Howe Press literature.)

REVERSE INDEXING TYPEWRITER



Photograph courtesy of David F. Law, Jr.

616

REVERSE INDEXING TYPEWRITER

DEVELOPER

Woodrow Wilson Rehab. Ctr.
Rehab. Engineering Dept.
Fishersville, VA 22939
(703) 885-9724

CONTACT PERSON

Randy Hinegardner
Brown's Business Machines
Staunton, VA 24401
(703) 886-3602

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

inability of quadriplegics to index paper up or down when using a mouthstick

FIELD TESTED

yes

Woodrow Wilson Rehabilitation Center and Market Area

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

Brown's Business Machines
1617 W. Beverley St.
Staunton, VA 24401

$970.00 (price subject to change without notice.)

HOW IT WORKS

An IBM Selectric^R self-correcting typewriter was adapted with an externally motorized platen to give up and down indexing. This worked well, but modifications were expensive and endeavors to have it commercially available were unsuccessful. A Royal 5000C^R was then selected, and through cooperation of a local distributor, internal modifications were made to add on this feature. This machine is also equipped with a paper inserter and mouthstick operable margins and tabs. Complete new units with modifications are available from the above. People who are quadriplegic may have varying degrees of upper trunk stability. By elevating the back of the typewriter the quadriplegic can more easily view the typed materials.

(Information provided by David F. Law, Jr.)

TALKING WORD PROCESSING SYSTEM

Photograph not available

TALKING WORD PROCESSING SYSTEM

DEVELOPER

Maryland Computer Services
502 Rock Spring Avenue
Bel Air, MD 21014
(301) 838-8888

CONTACT PERSON

Phyllis Barnes
Maryland Computer Services
502 Rock Spring Avenue
Bel Air, MD 21014
(301) 838-8888

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not provided

REGULATORY APPROVAL

UL

WARRANTY PROVIDED

yes

FOR SALE

Maryland Computer Services
502 Rock Spring Avenue
Bel Air, MD 21014

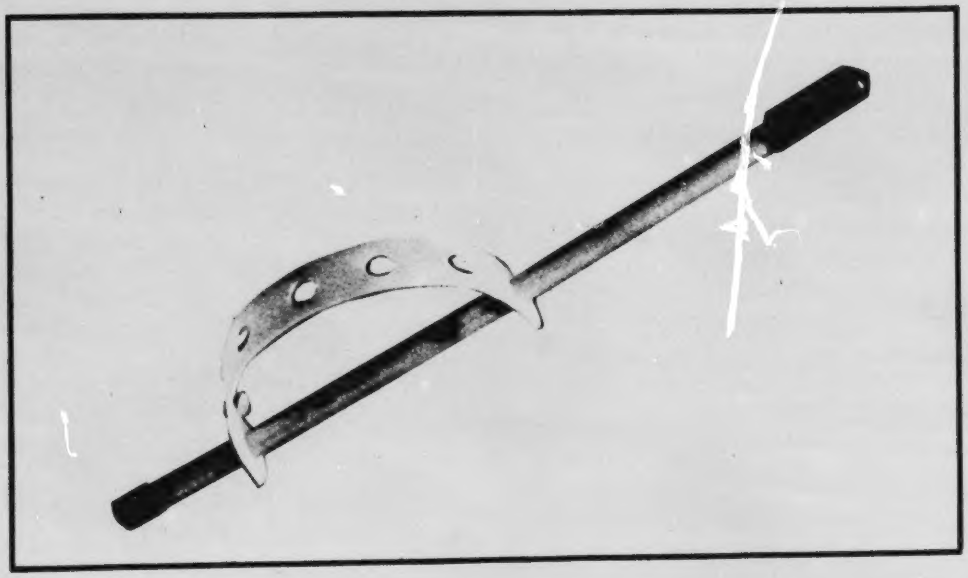
HOW IT WORKS

This (TWP) system stores all text in memory which allows the user to add, edit or print a document, adjust the format of a printed page, fetch a section of text, replace one section of text with another, insert or delete lines or characters. To check what has been entered, the user presses a key which tells the unit to speak any or all characters entered. A document can be proofed, corrected and edited using the audio indicator. Only corrections are entered to replace errors. The speech box has full word synthetic speech called Speak Easy. All text also appears on the visual display. An option of the TWP enables the system to automatically transcribe and emboss documents in American Standard Braille. The user enters the document on the keyboard and the command to translate and emboss. Any braille embosser can be used with this system.

(Information based on Maryland Computer Services literature.)

619

TOUCH-N-TYPE™ STICK



Photograph courtesy of Gilbert L.
Fink, Therafin Corporation

620

TOUCH-N-TYPE™ STICK

DEVELOPER

Therafin Corporation
3800 S. Union Avenue
Steger, IL 60475
(312) 755-1535

CONTACT PERSON

Gilbert L. Fink
Therafin Corporation
3800 S. Union Avenue
Steger, IL 60475
(312) 755-1535

WHERE IT IS USED

Communication
Computer Processing
Typing

PROBLEM(S) IT OVERCOMES

loss of hand or finger muscle control

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Therafin Corporation
3800 S. Union Avenue
Steger, IL 60475

$3.25 each

HOW IT WORKS

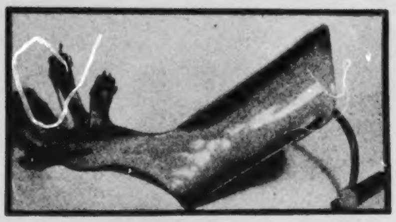
This device is a 12" rod covered with plastic and with a Plastisol no-slip tip. It has an adjustable loop that can be raised, lowered or shortened for individual use. It can also be used as a mouthstick. The stick can be used to operate typewriters, telephones and computer keyboards.

(Information based on Therafin Corporation brochure.)

621

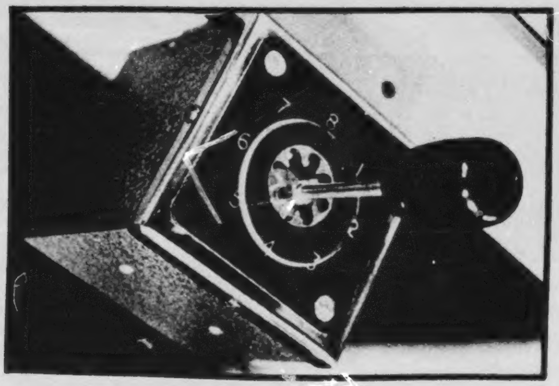
TYPEWRITER CONTROL SYSTEMS

Footskate

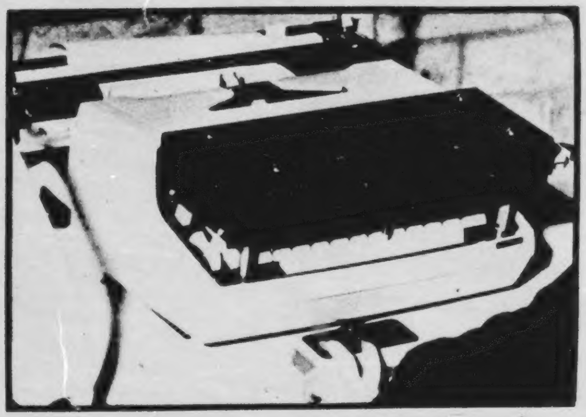


Splint

Heavy Duty Foot Switch



Joystick



Overdeck Conversion

Photographs courtesy of Possum Controls, Inc.

TYPEWRITER CONTROL SYSTEMS

DEVELOPER

Possum Controls, Inc.
11 Fairacres Industrial
Estate
Windsor Berkshire
England

CONTACT PERSON

Ann F. Gurr
Possum, Inc.
P.O. Box 451
Midwood Station
Brooklyn, NY 11230
(212) 243-1658

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

unable to use typewriter in conventional manner

FIELD TESTED

yes

Britain

REGULATORY APPROVAL

FDA

WARRANTY PROVIDED

yes

FOR SALE

Possum, Inc.
P.O. Box 451
Midwood Station
Brooklyn, NY 11230

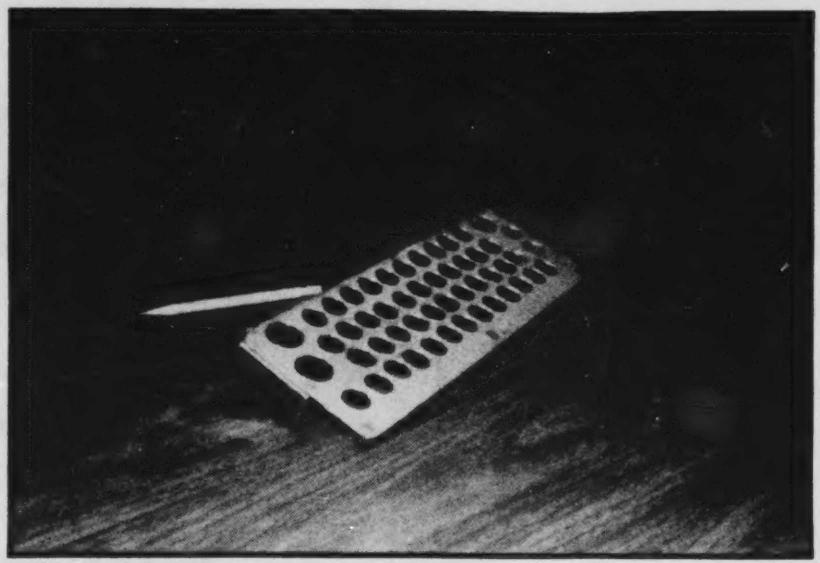
Price dependent on individual system requirements $3,500 - $8,600 range.

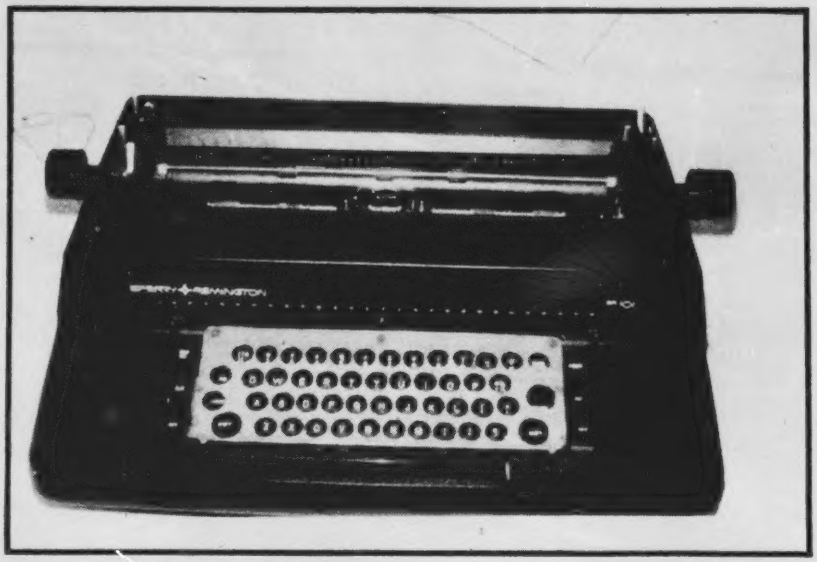
HOW IT WORKS

Made to use with IBM, Smith Corona and Brother typewriters, systems are operated with 1, 2, 4 or 8 microswitches. Type 1A/5A - operated by a single or two inputs, gives a speed of up to 10 words per minute (w.p.m.), supplied with an illuminated visual indicator. Type 8A - operated by 8 inputs, cannot be mouth operated. Switches are operated in sequence giving a typing speed of up to 40 w.p.m., no reaction time limit. There is also a Type 6A and Type 3A. Input Controls are trolley mounted, continuous stationery of up to 250 sheets is provided. Types of inputs: Joy Stick - small movement into any of 8 slots arranged around the Joy Stick activates microswitches which control the typewriter. Footskate - fine foot control used to select up to 8 microswitches with a 'skate' input. Splint - microswitches mounted on a splint operated by flicker in a finger. See Possum™ Input Controls (p. 312) for other inputs. Mini Keyboard - by means of a stylus, a miniature keyboard can be used to operate a typewriter. Possum Expanded Keyboard - enlarged keyboard is connected to a typewriter, keys are spaced out and recessed. It gives a speed of 5 to 12 w.p.m., a delay can be introduced for use by those with a severe tremor. Overdeck Coversions - placed over existing keys, removal of the overdeck enables typewriter to be used in conventional manner.

(Information based on Possum Controls, Inc. literature.)

TYPEWRITER GUARD




SPERRY REMINGTON

Photographs courtesy of
Dan Golden

624

TYPEWRITER GUARD

DEVELOPER

Dan Golden
CETA Welding Instructor
Wisconsin Indianhead
Technical Institute
New Richmond Campus
1019 S. Knowles Avenue
New Richmond, WI 54017
(715) 246-6561

CONTACT PERSON

Jeanette M. Richardson
Supervisor
Office & Marketing Education Department
WITI-New Richmond Campus
1019 S. Knowles Avenue
New Richmond, WI 54017
(715) 246-6561

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

limited hand dexterity and control

FIELD TESTED

yes

in use at WITI - New Richmond, WI

REGULATORY APPROVAL

no

WARRANTY PROVIDED

no

FOR SALE

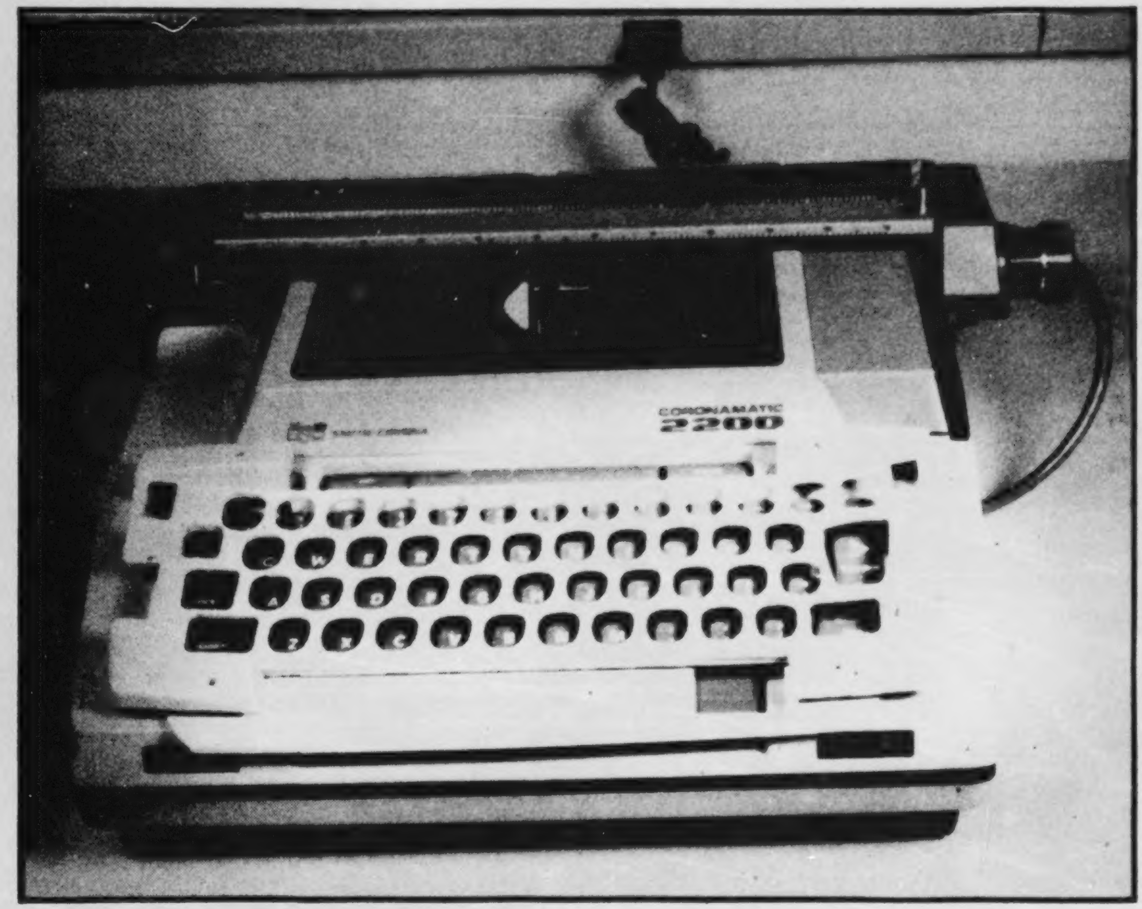
May be made at a minimal cost.

HOW IT WORKS

When the guard is placed over the keys of the electric typewriter, snapping into place, it serves to guide the typist to strike the correct key.

(Information based on personal interview.)

TYPEWRITER MASK AID


CORONAMATIC
2200

Photograph courtesy of
Smith-Corona

626

TYPEWRITER MASK AID

DEVELOPER

CONTACT PERSON

Arthur P. Wales
Smith-Corona
SCM Corporation
Consumer Products Div.
65 Locust Avenue
New Canaan, CT 06840
(203) 972-1471

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

lack of hand control

FIELD TESTED

yes

in use for 8-10 years

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

no

FOR SALE

Smith Corona
National Service Store
46 Elm Street
Cortland, NY 13045

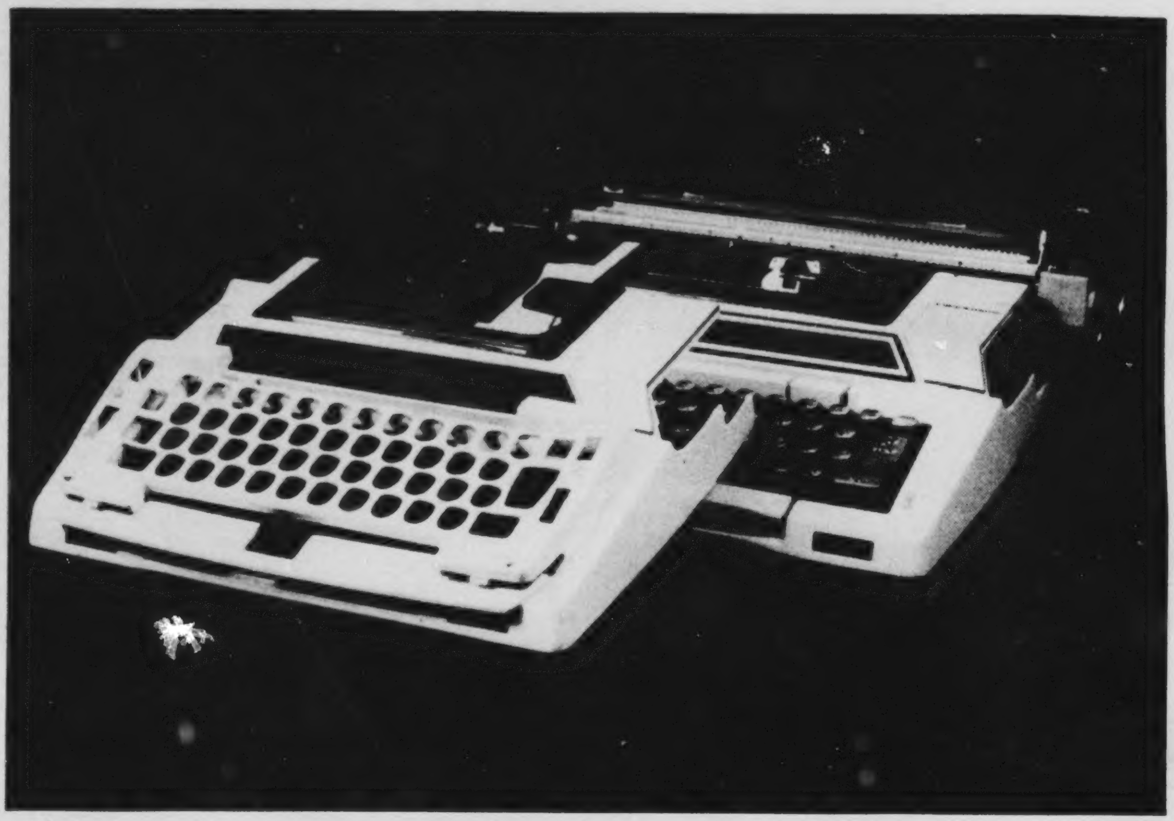
$27.50

HOW IT WORKS

The Mask Aid is available in the form of a kit for installation on a standard typewriter (available only on the SCM Model 2200). This auxilliary keyboard mask attaches flush or slightly above the keys. It prevents those persons with poor hand guidance control from tripping more than one key at a time. The Mask supports the hands so that a finger can locate the desired holes in the Mask to depress the desired key. A cover plate over the space bar also supports the hand to prevent accidental character spacing. An opening in the cover allows a finger to enter the opening to operate the space bar.

(Information based on Smith-Corona literature.)

TYPEWRITER, ONE HAND, WITH SHIELD



628

Photograph courtesy of
Typewriting Institute for
the Handicapped

TYPEWRITER, ONE HAND, WITH SHIELD

DEVELOPER

Typewriting Institute
for the Handicapped
3102 W. Augusta Avenue
Phoenix, AZ 85021
(602) 939-5344

CONTACT PERSON

Kenneth Diamond
Typewriting Institute
for the Handicapped
3102 W. Augusta Avenue
Phoenix, AZ 85021
(602) 939-5344

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

difficulties experienced by a one handed typist using a standard keyboard

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Typewriting Institute for the Handicapped
3102 W. Augusta Avenue
Phoenix, AZ 85021

Typewriter	$450 + shipping
Shield	$45

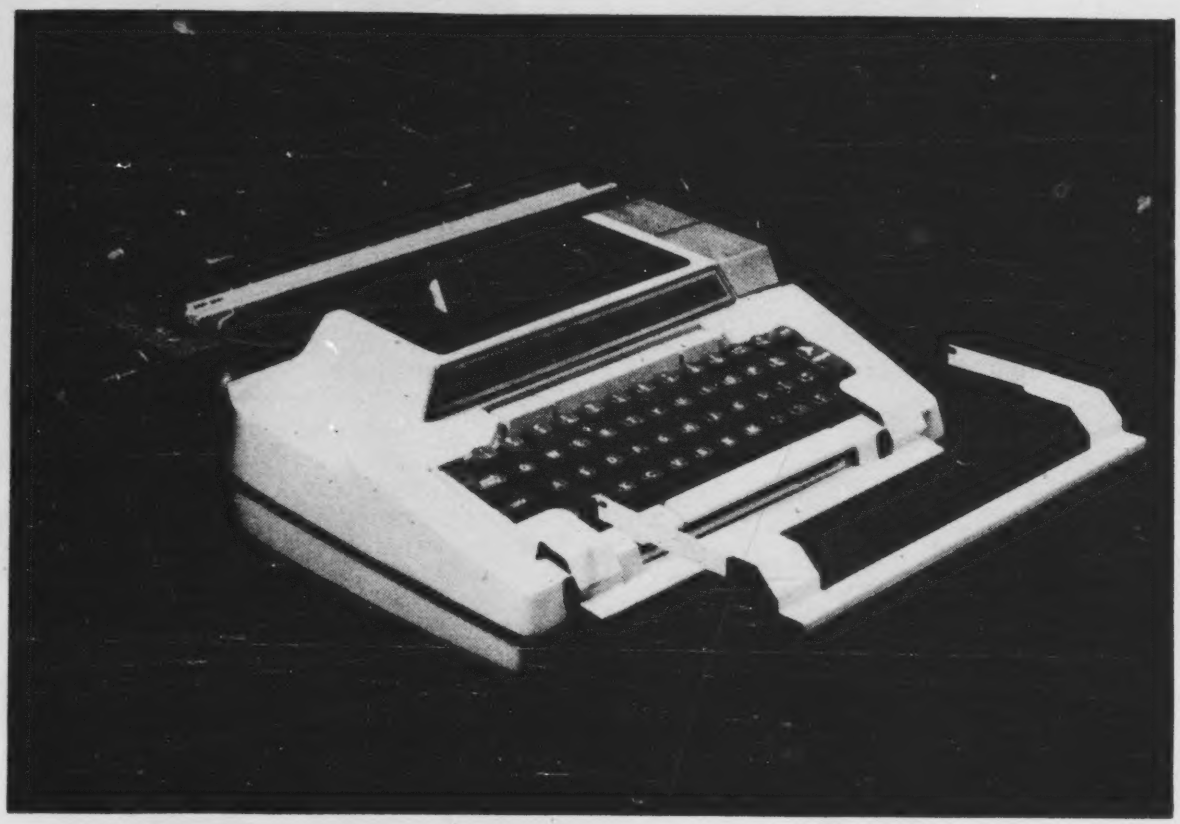
HOW IT WORKS

Typewriter - These are electric compact office-size portables with a 12 inch carriage. The typewriters are available in right hand or left hand models. The frequently used letters are concentrated in the center. This eliminates muscular contortions and strenuous reaches. On the standard keyboard, the left-hand typist does 43% of the typewriting with the little finger. The Dvorak One-Hand Typewriter Keyboard for left hand assigns only 15.3% of the typewriting load to the little finger, 18.3% to the ring finger, 29.7% to the middle finger, and 36.7% to the index finger. The right-hand keyboard provides almost identical distribution of the finger load. Shift keys are operated with little finger or thumb. A special training manual has been prepared for both the right and left-hand typist using the Dvorak One-Hand Keyboards. It can be used either as a home study course or as a classroom text. It is included with every Dvorak One-Hand Typewriter sold by the Institute.

Shield - For those with a dexterity problem, Typewriting Institute has available a shield which is easily attached to the Dvorak One-Hand Typewriter or their standard typewriter. The shield helps the typist avoid striking adjoining keys. In addition, the shield is helpful to the handicapped typist who must rest his or her hand on the typewriter for support. The shield is also used when the typist must type with a hand, head or mouth stick.

(Information based on company literature.)

TYPEWRITER "SHIFT EASY" SHIFT BAR



630

Photograph courtesy of Smith
Corona, Inc.

TYPEWRITER "SHIFT EASY" SHIFT BAR

DEVELOPER

Typewriting Institute
for the Handicapped
3102 W. Augusta Avenue
Phoenix, AZ 85021
(602) 939-5344

CONTACT PERSON

Kenneth Diamond
Typewriting Institute
for the Handicapped
3102 W. Augusta Avenue
Phoenix, AZ 85021
(602) 939-5344

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

shifting for capital letters when typing

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Typewriting Institute for the Handicapped
3102 W. Augusta Avenue
Phoenix, AZ 85021
$45.00

HOW IT WORKS

Typewriting Institute for the Handicapped has developed a new optional shift key bar, the "Shift-Easy." Up until now, shifting for capital letters has been difficult for the one-hand typist where the typist is unable to use his or her other hand to depress the regular shift key. With Shift-Easy the one-hand typist can shift with the thumb or palm of the typing hand without going off home position. Shift-Easy is easily attachable and detachable from the Dvorak One-Hand Typewriter. No screws or tools are needed.

(Information based on company literature.)

TYPING, ONE-HANDED

Photograph not available

632

TYPING, ONE-HANDED

DEVELOPER

Susanne Wynkoop
Associated Craftsmen
Easter Seals
15 Emerald Street
Hackensack, NJ 07601
(201) 342-5734

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Typing

PROBLEM(S) IT OVERCOMES

difficulty keeping one's hand properly positioned on the keyboard

FIELD TESTED

yes

Associated Craftsmen/Easter Seals

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

not applicable

HOW IT WORKS

The Office Skills Program has evolved a rather simple method of teaching typing to people with the use of only one hand. They use standard electric typewriters and standard typewriting textbooks. Masking tape is applied to the A and F keys for right-handed people and to the J and semicolon keys for left-handed people. The difference in texture becomes a guide to proper finger placement. The hand hovers about one-half inch over the keys.

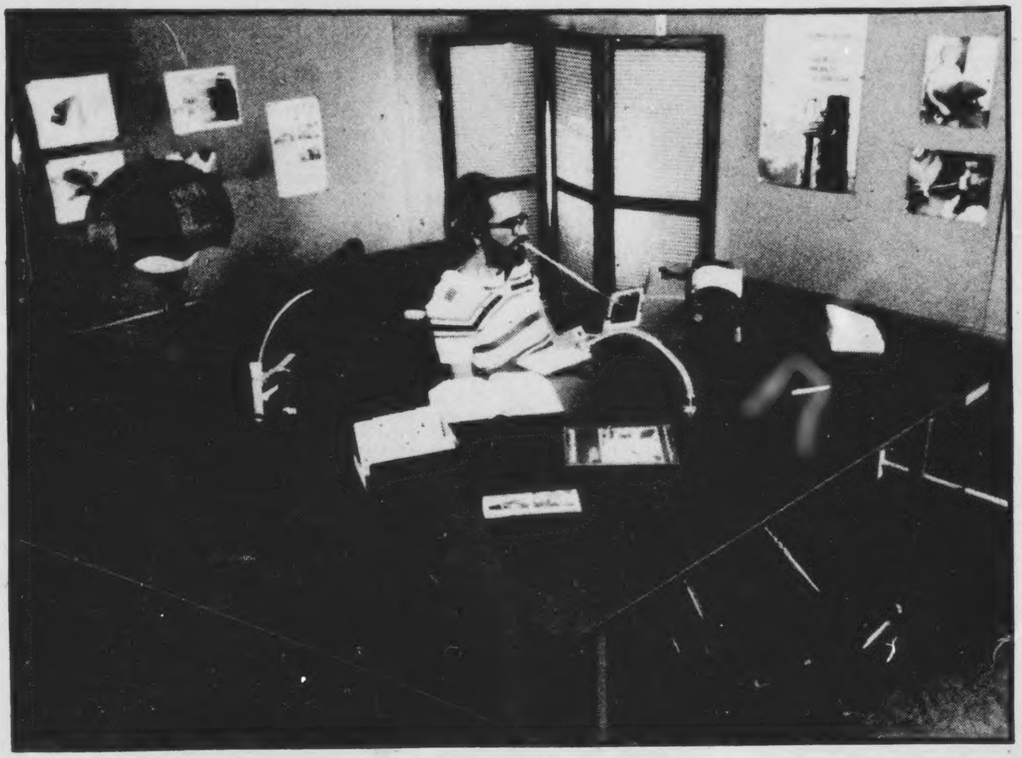
Although a company has invented a one-handed typewriter, the Office Skills Program feels it is impractical to assume that people will bring their portable typewriter to employment interviews and later to the job. Further, it is felt that the use of a "special" typewriter classifies them as "different" or "inferior" and emphasizes the negative aspects of a person's disability. Indeed, people have reported that when they used a standard typewriter and on the job achieved office typing speed levels with one hand, they were made to feel "special" and "superior" and this produces a sense of accomplishment in the disabled worker.

(Information provided by Susanne Wynkoop.)

WORK TABLES

Desk, Twin-Turntable 664
LaBerne Work Tables 666
Table, Adjustable Height 668
Tables 670
Universal Desk 672
Work Table 674

DESK, TWIN-TURNTABLE



635

Photograph courtesy of
Arthur Heyer

DESK, TWIN-TURNTABLE

DEVELOPER

Arthur Heyer
Extensions for Independence
P.O. Box 3754
Downey, CA 90242
(213) 862-2704

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Education Settings
Office Settings

PROBLEM(S) IT OVERCOMES

difficulty reaching for and moving books, typewriters, or other office machines

FIELD TESTED

yes

three years of personal use; also used by over forty other quadriplegics in the U.S.A.

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Extensions for Independence
P.O. Box 3754
Downey, CA 90242

Twin-Turntable desk, medium $715.00
Twin-Turntable desk, executive $795.00
Single turntable desk $595.00

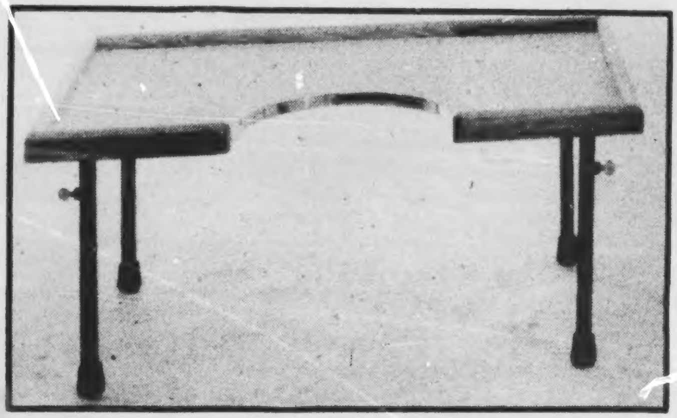
HOW IT WORKS

This desk has two revolving surfaces which can be easily rotated with a hand or a mouthstick. One rotating surface may be used for reference materials and files, while the other may contain typewriter, tape recorder, etc. The desk is of tubular frame construction and has detachable legs. The revolving surfaces are supported by a precision balanced system of ball bearings. A central opening, two inches in diameter, is in each turntable to allow electrical cords to run through. The top is finished in woodgrain formica.

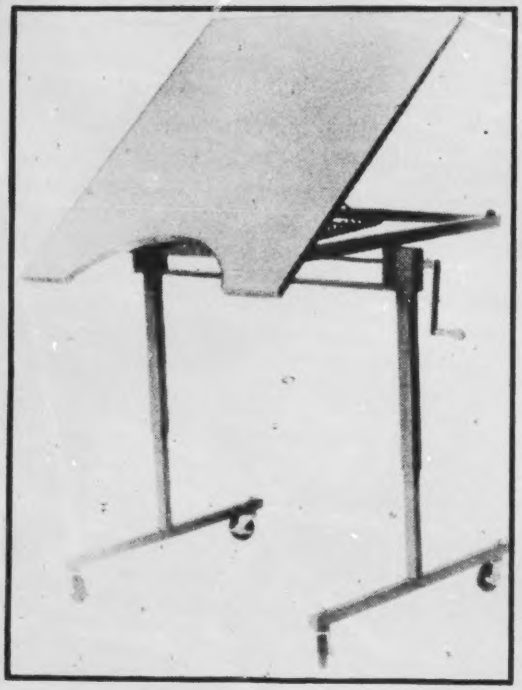
(Information based on Extensions for Independence literature.)

636

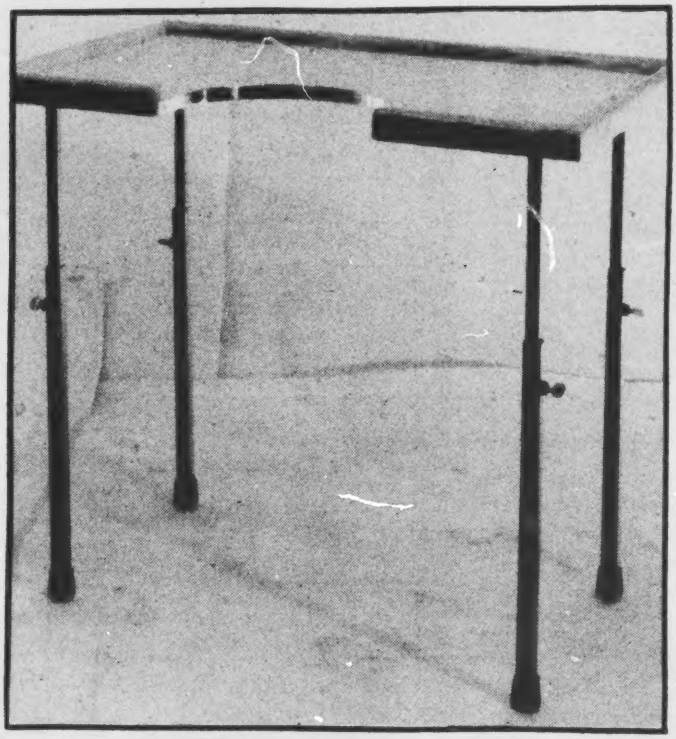
LABERNE WORK TABLES



Cut-Out Work Table



Adjustable Work Table



Cut-Out Work Table

Photographs courtesy of LaBerne Manufacturing Co., Inc.

LABERNE WORK TABLES

DEVELOPER

W. E. Berne
P.O. Box 9245
Columbia, SC 29290
(803) 776-1115

CONTACT PERSON

Same as Developer

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

unable to use standard height table

FIELD TESTED

yes

in use in physical therapy departments all over U.S.A. and abroad

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

LaBerne Manufacturing Co., Inc.
P.O. Box 9245
Columbia, SC 29290

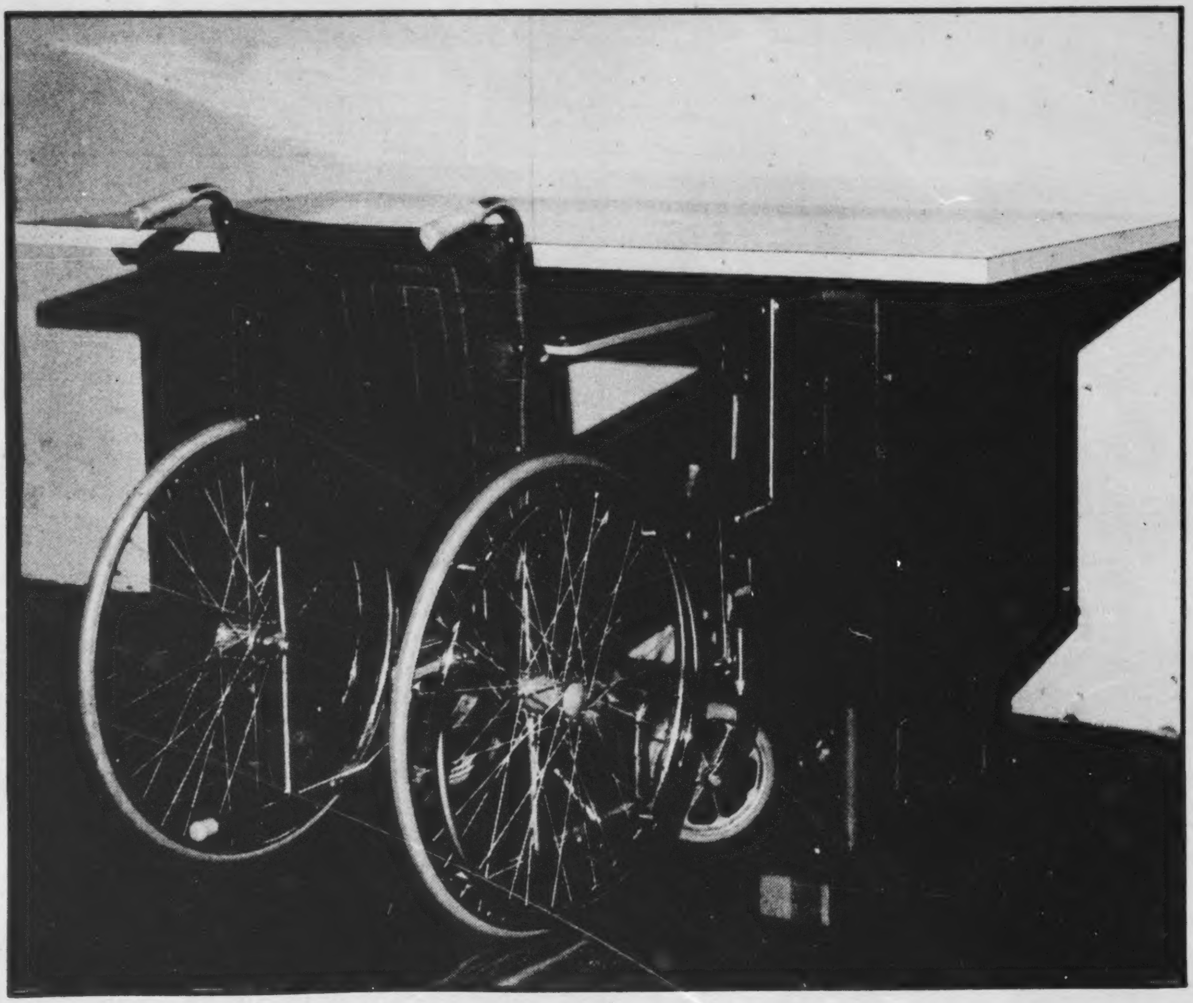
Adjustable Work Table $520.00
Cut-Out Work Table (Adult) $195.00
F.O.B. Columbia, SC

HOW IT WORKS

The adjustable work table is made of telescopic tubular steel mounted on 3" rubber tire casters with locks. It adjusts in height from 28" to 38" with the use of a hand crank. The top is hinged from the front and adjustable to a 45° tilt. It measures 32"x36" and has a front cut-out. The cut-out work table also has tubular steel legs. The top is 24"x36". The table adjusts in height from 22" to 35".

(Information based on LaBerne catalog, September, 1978.)

TABLE, ADJUSTABLE HEIGHT



639

Photograph courtesy of
Brodhead Garrett Co.

TABLE, ADJUSTABLE HEIGHT

DEVELOPER

Brodhead Garrett Co.
4560 East 71st Street
Cleveland, OH 44105
(216) 341-0248

CONTACT PERSON

Same as Developer

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

difficulty experienced by wheelchair users in attempting to use common desks and tables

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Brodhead Garrett Co.
4560 East 71st Street
Cleveland, OH 44105

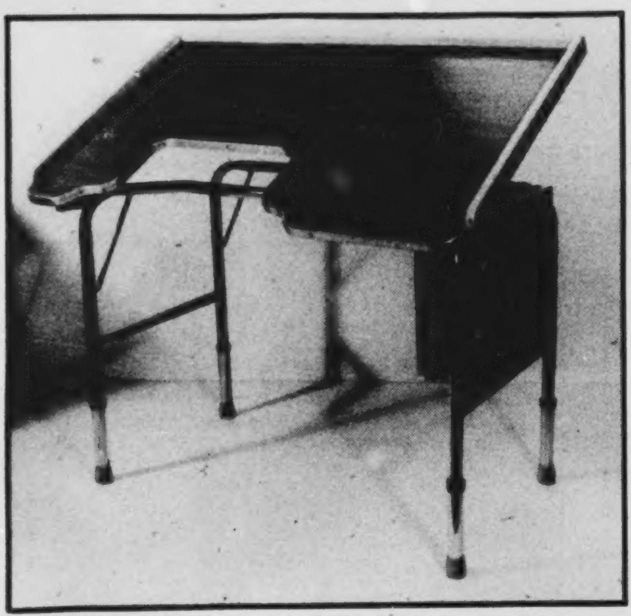
Model No. HL-3060 $645.00
Shipping Weight 232 lbs.

HOW IT WORKS

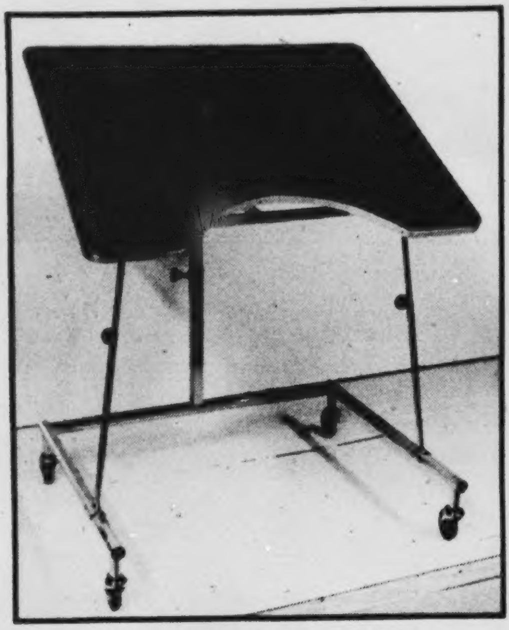
Adjustable height table is a suitable work area in the classroom for the student in a wheelchair. The table is adjustable by a pull out fold down handle. It adjusts from 28" to 38" high. Top surface is 1¼" thick covered with laminated plastic, size 30" x 60".

(Information based on Brodhead Garrett Co. literature.)

640



Adjustable Height Tilt Top Work Table



Mobile Adjustable Height
Wheelchair Table

Individual Cut Out Table

Photographs courtesy of Bailey
Manufacturing Co.

TABLES

DEVELOPER

Bailey Manufacturing Co.
118 Lee Street
Lodi, OH 44254
(216) 948-1080

CONTACT PERSON

Adelle
Bailey Manufacturing Co.
118 Lee Street
Lodi, OH 44254
(216) 948-1080

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

unable to use standard height table

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Bailey Manufacturing Co.
118 Lee St.
Lodi, OH 44254

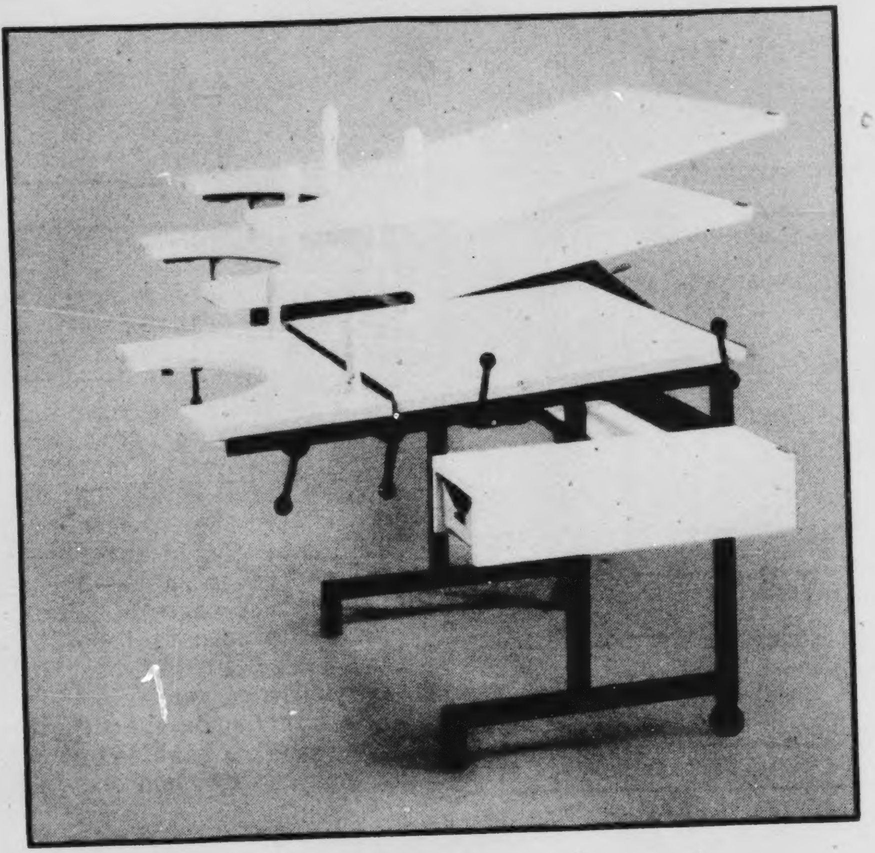
School Desk - $199.00
Tilt Top - $275.00
Mobile Adjustable - $360.00
Individual Cut Out - $130.00

HOW IT WORKS

Several table models are available. The Adjustable Height School Desk adjusts from 24" to 34". It has a 9" x 14" cut out, a bookholder is on the right underside of the table top. It has plastic adjustable glides for uneven floors. The Adjustable Height Tilt Top Work Table adjusts from 25" to 29". The top tilts up to 45°. The Mobile Adjustable Height Wheelchair Table adjusts from 26" to 37". The top tilts up to 45°. It moves on swivel lock casters. The Individual Cut Out Table adjusts from 21" to 33". It has a 7" x 10" cut out, (other sizes available on request). It can be used in a sitting or standing position with the standing stabilizers. The door swings out or down and locks in place.

(Information based on Bailey Catalog No. 0583 April 1, 1979.)

UNIVERSAL DESK



Photograph courtesy of
Maddak, Inc.

UNIVERSAL DESK

DEVELOPER

Manufactured by:
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

CONTACT PERSON

Fred M. Joslyn
Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

confinement to a wheelchair

FIELD TESTED

information not available

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

information not available

FOR SALE

Maddak, Inc.
Pequannock, NJ 07440

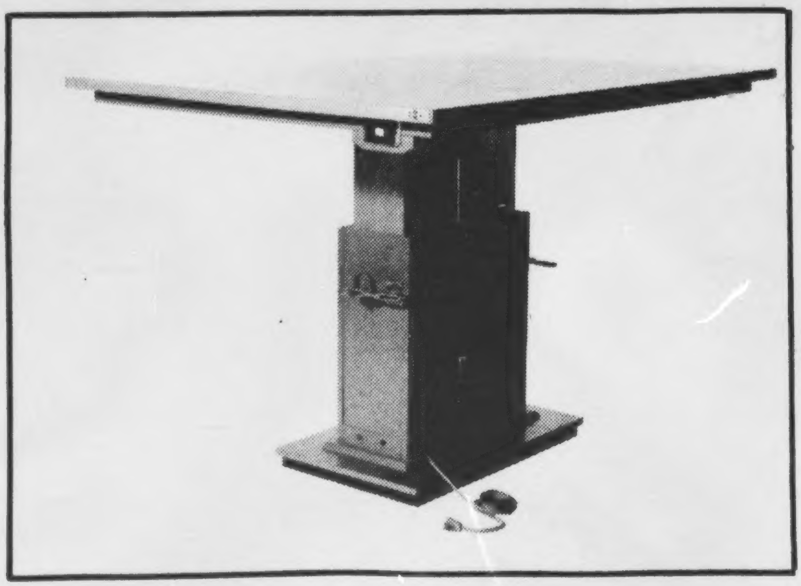
$420.00

HOW IT WORKS

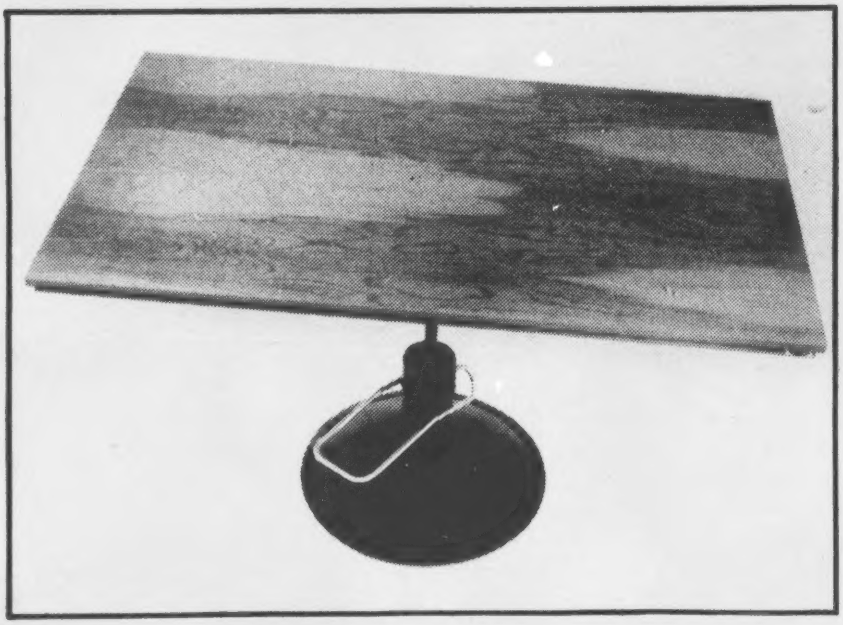
The Universal Desk is totally adjustable for all body sizes and types of work through stepless height adjustment. It accommodates all kinds of seats and many accessories are available. The worktop adjusts from 23.6" high to 43.3" maximum. Angle adjustment is from horizontal to 85° (almost vertical). It can be used from a sitting or standing position. All corners are rounded and have plastic edge strips. The desk is supplied with a front adjustable stopper bar to hold papers while tilted.

(Information based on Maddak Catalog No. 479, 1979.)

WORK TABLE



Electric



Hydraulic

Photographs courtesy of Hausmann Industries

WORK TABLE

DEVELOPER

Hausmann Industries
130 Union Street
Northvale, NJ 07647
(201) 767-0255

CONTACT PERSON

Rose Rowan
Advertising Manager
Hausmann Industries
130 Union Street
Northvale, NJ 07647
(201) 767-0255

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

unable to use standard height table

FIELD TESTED

information not available

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

yes

FOR SALE

Hausmann Industries
130 Union Street
Northvale, NJ 07647

HOW IT WORKS

A heavy-duty work table with an H-type center column, it allows for the close approach of wheelchairs and can accommodate up to 6 people standing or sitting. The electric model is operated with a Hi-Low actuator controlled with a one button switch. The hydraulic model is controlled with a foot operated hydraulic lift release. The table height can be adjusted from 29" to 44". The Economy Hydraulic Work Table is not of heavy-duty construction. The table top height can be adjusted from 28" to 36" using a foot pedal control to operate the hydraulic base.

(Information based on Hausmann catalog.)

WRITING

APH Signature Guide 678

Easy Grasp Pencil 680

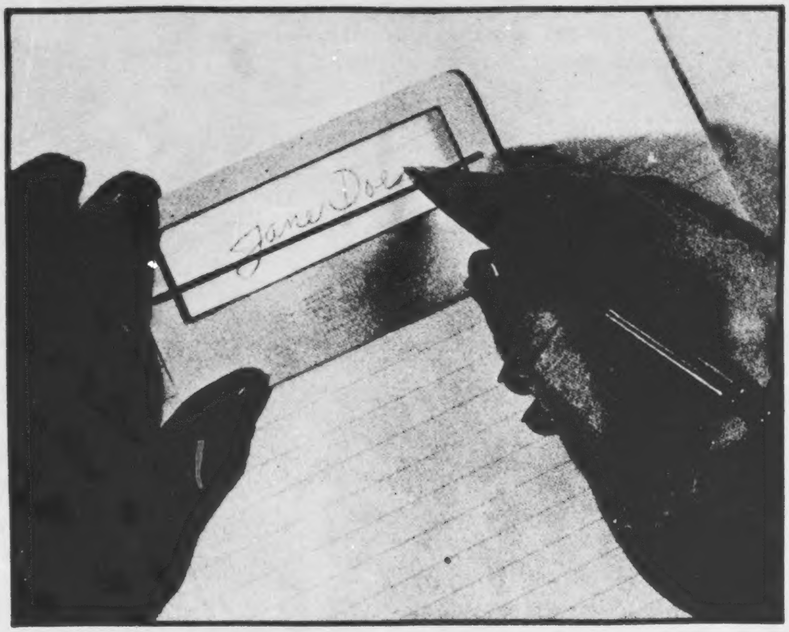
Keitzer Check Writing Guide 682

Raised-Line Checkbook 684

Signature Guide 686

647

APH SIGNATURE GUIDE



Photograph courtesy of
American Printing House
for the Blind

APH SIGNATURE GUIDE

DEVELOPER

American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken
American Printing House
for the Blind
1839 Frankfort Avenue
Louisville, KY 40206
(502) 895-2405

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

visual impairment; writing difficulty

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

information not available

FOR SALE

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

$2.25

HOW IT WORKS

The signature guide is designed for use by blind people able to sign their names in script, but in need of a device to help them write on a straight line. It is made of annodized, natural-colored aluminum, with a rubber backing to help hold it in place when writing. A piece of rubber elastic stretched across the open frame gives a guideline for writing, at the same time permitting dropping below the line of writing for the lower ends of such letters as "j", "f", "g", etc. To use the frame, it should be placed in position with the rubber elastic running along the line of writing. Writing should be done by a pencil or ball-point pen.

(Information based on American Printing House for the Blind literature.)

EASY GRASP PENCIL

DEVELOPER

Don Maurer
Northern Wisconsin Center
for the Developmentally
Disabled
Box 340
Chippewa Falls, WI 54729
(715) 723-5542

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Benchwork
Bookkeeping
General Use

PROBLEM(S) IT OVERCOMES

inability to grasp articles

HOW IT WORKS

The pencil holder increases the area to be grasped and its shape allows a different grasping action. The large part of the holder fits into the palm of the hand. A shorter pencil is more manageable than a longer one.

(Information based on personal interview.)

FIELD TESTED

yes

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

May be made at a minimal cost.

KEITZER CHECK WRITING GUIDE

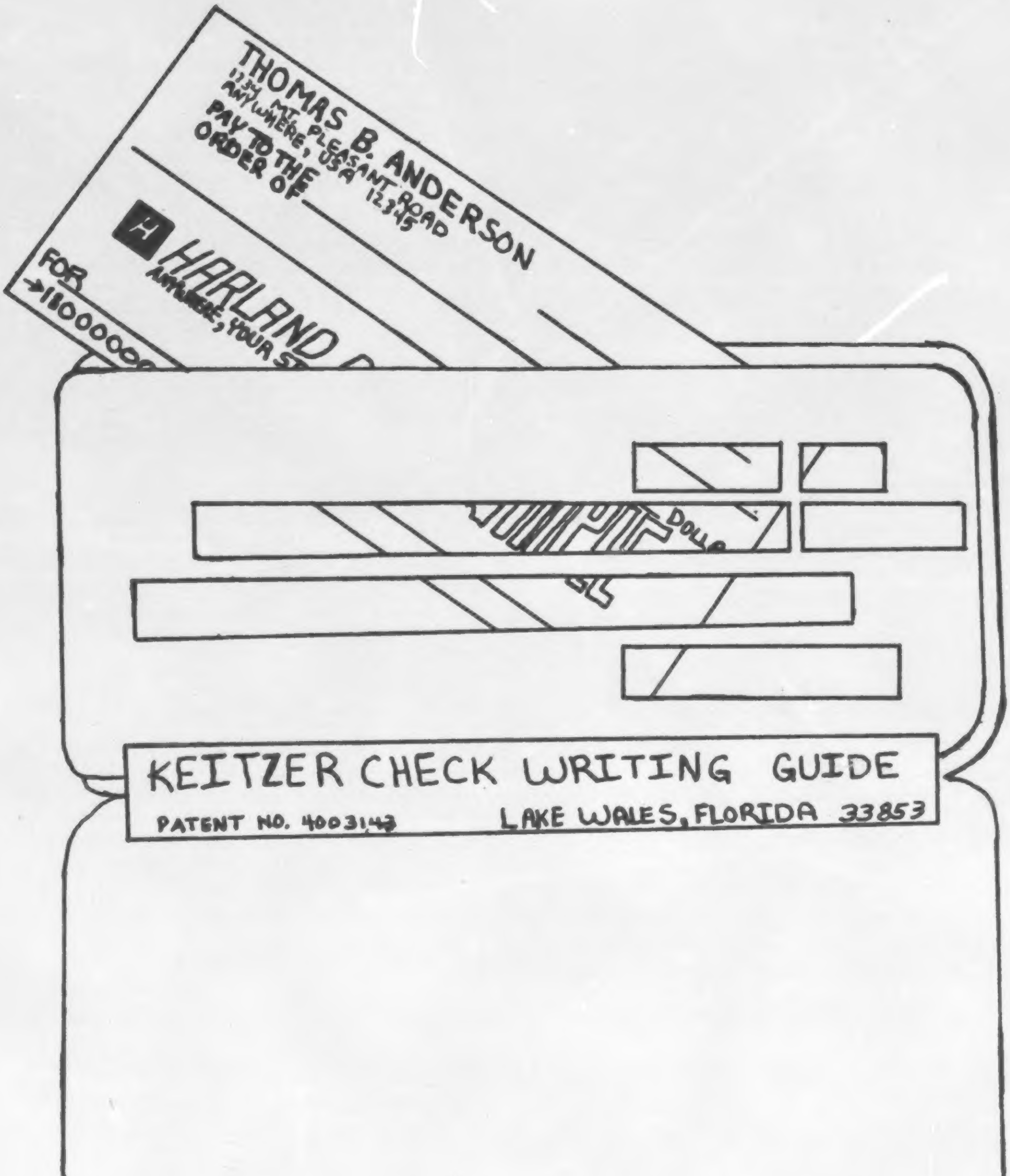

THOMAS B. ANDERSON
1234 MT. PLEASANT ROAD
ANYWHERE, USA 12345
PAY TO THE ORDER OF
HARLAND
ANYWHERE, YOUR ST
FOR
⑆1000000
DOLLA
KEITZER CHECK WRITING GUIDE
PATENT NO. 4003143
LAKE WALES, FLORIDA 33853

Illustration courtesy of
Mrs. Betty Jo Keitzer,
redrawn by Terri Bleck, WVSC

KEITZER CHECK WRITING GUIDE

DEVELOPER

John and Betty Jo
Keitzer
1129 Peninsula Drive
Lake Wales, FL 33853
(813) 676-1805

CONTACT PERSON

Mrs. Betty Jo Keitzer
1129 Peninsula Drive
Lake Wales, FL 33853
(813) 676-1805

WHERE IT IS USED

Writing checks

PROBLEM(S) IT OVERCOMES

writing difficulty; visual impairment

FIELD TESTED

yes

REGULATORY APPROVAL

no

WARRANTY PROVIDED

yes

FOR SALE

Mrs. Betty Jo Keitzer
1129 Peninsula Drive
Lake Wales, FL 33853

$7.00

HOW IT WORKS

A plastic template guide has cutouts corresponding to the spaces on a standard end stub check for date, payee, amount, written amount and signature. A base plate holds the guide steady while in use. Guides are available in right and left handed models.

(Information based on Keitzer literature.)

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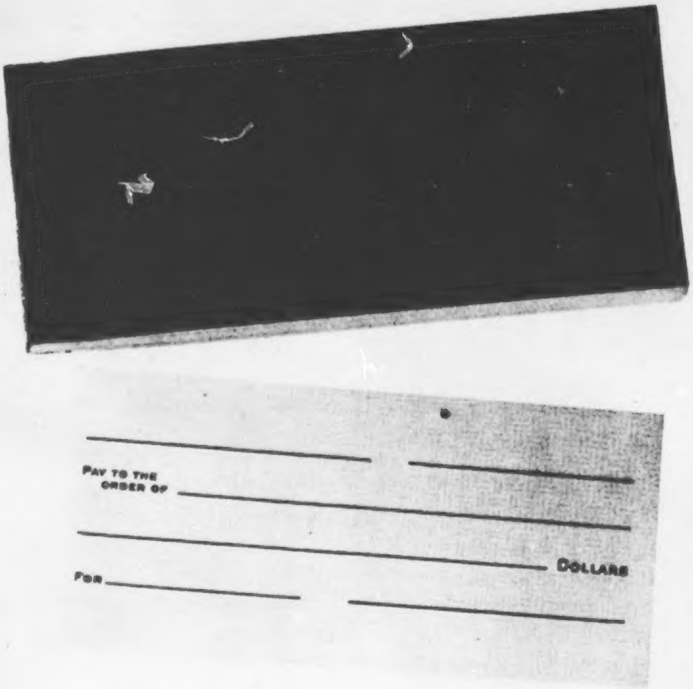
RAISED-LINE CHECKBOOK


PAY TO THE ORDER OF
DOLLARS
FOR

Photograph courtesy of
American Printing House
for the Blind

.654

RAISED-LINE CHECKBOOK

DEVELOPER

Manufactured by:
American Printing House for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

CONTACT PERSON

Ralph E. McCracken
American Printing House for the Blind
1839 Frankfort Avenue
Louisville, KY 40206
(502) 895-2405

WHERE IT IS USED

General Use

PROBLEM(S) IT OVERCOMES

visual impairment

FIELD TESTED

information not available

REGULATORY APPROVAL

U.S. Department of Health, Education and Welfare

WARRANTY PROVIDED

information not available

FOR SALE

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, KY 40206

$6.00 per book

HOW IT WORKS

The raised-line checkbook is printed with raised print lines on regulation checkbook paper which are interleaved with plain braille paper for stub recordkeeping. The cover is made of regular bankbook stock and the entire booklet bound in perfect binding. The checks are perforated for easy detachment. There are 50 each of the checks and stubs per book.

(Information based on American Printing House for the Blind literature.)

SIGNATURE GUIDE

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Photograph courtesy of Sped Publications

SIGNATURE GUIDE

DEVELOPER

CONTACT PERSON

Billie Taylor
Sped Publications
2010 Eagle View
Colorado Springs, CO
80909

WHERE IT IS USED

Signing checks or other documents

PROBLEM(S) IT OVERCOMES

visual impairment

HOW IT WORKS

The guide is a plastic template with a rectangular cut out which is placed over the area to be signed.

(Information based on Sped Publications brochure.)

FIELD TESTED

yes

Colorado School for the Deaf and the Blind

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

information not available

FOR SALE

Sped Publications
2010 Eagle View
Colorado Springs, CO 80909

$1.00

Bibliography

The following is a listing of titles used in the catalog text. Other titles of interest to the reader will be found in Appendix E, Publications.

Biddy, R.L., Smith, D.R., & Swarts, A.E. Examples of jig and fixture design as applied to the severely disabled functioning in a sheltered workshop. Houston, Texas: Texas Rehabilitation Engineering Center, 1976.

Bonner, W., Eckles, C., & Stern, A. A handbook of workshop production aids: Jigs, fixtures, tooling. Sacramento, California: Department of Rehabilitation, Facilities Development Section, 1974.

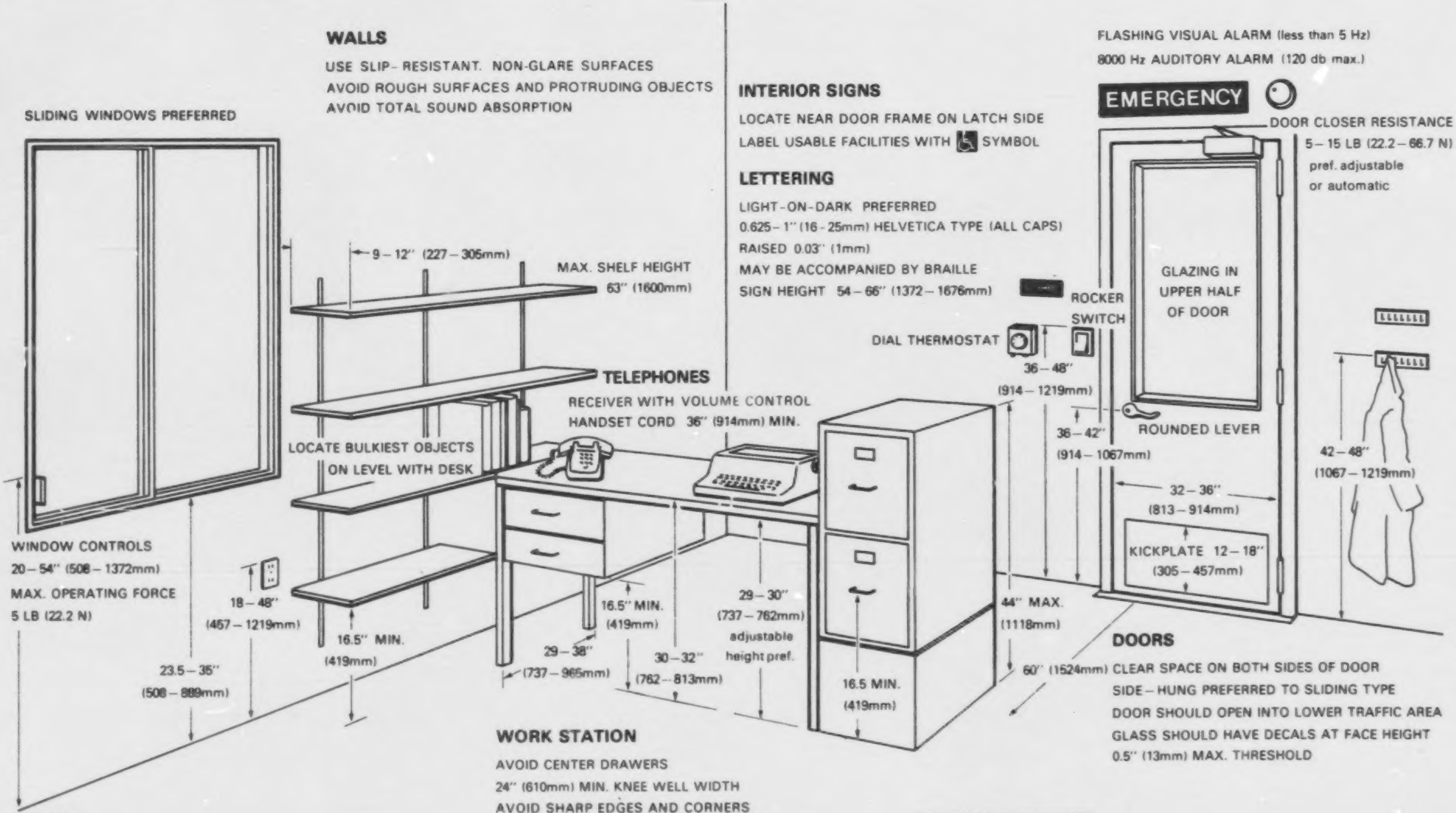
Clark, C., & Chadwick, D. Clinically adapted instruments for the multiply handicapped: A sourcebook. Westford, Massachusetts: Modulations Co., 1979.

APPENDIX A

Modifications to the Work Environment

In a publication such as this which concentrates on describing individual products, it is sometimes difficult to visualize how a product could be integrated into a work setting. To address this problem, Appendix A contains examples of nine different worksites which could be modified to aid not only employers who have sensory or lower body limitations but also able bodied employees. More specific modifications may still be required in order to make Worksite One and Worksite Two suitable for a particular disabled individual.

Worksite One and Worksite Two were developed by James Mueller of the Job Development Laboratory, George Washington University Rehabilitation Research and Training Center, 2300 Eye St, N.W., Washington, D.C. 20037, and are part of the publication entitled *Designing for Functional Limitations.* This publication was supported in part by HEW/RSA Grant No. 16-P-56803/3-15, and was completed in September, 1979. Reprinted with permission of the author. (Also see: Publications.)


FLASHING VISUAL ALARM (less than 5 Hz)
8000 Hz AUDITORY ALARM (120 db max.)
EMERGENCY
DOOR CLOSER RESISTANCE
5 – 15 LB (22.2 – 66.7 N)
pref. adjustable
or automatic
SLIDING WINDOWS PREFERRED
9 – 12" (227 – 305mm)
MAX. SHELF HEIGHT
63" (1600mm)
GLAZING IN
UPPER HALF
OF DOOR
ROCKER
SWITCH
DIAL THERMOSTAT
36 – 48"
(914 – 1219mm)
ROUNDED LEVER
36 – 42"
(914 – 1067mm)
42 – 48"
(1067 – 1219mm)
32 – 36"
(813 – 914mm)
KICKPLATE 12 – 18"
(305 – 457mm)
LOCATE BULKIEST OBJECTS
ON LEVEL WITH DESK
WINDOW CONTROLS
20 – 54" (508 – 1372mm)
MAX. OPERATING FORCE
5 LB (22.2 N)
18 – 48"
(457 – 1219mm)
16.5" MIN.
(419mm)
23.5 – 35"
(508 – 889mm)
16.5" MIN.
(419mm)
29 – 38"
(737 – 965mm)
30 – 32"
(762 – 813mm)
29 – 30"
(737 – 762mm)
adjustable
height pref.
16.5 MIN.
(419mm)
44" MAX.
(1118mm)
60" (1524mm)

WALLS

USE SLIP- RESISTANT. NON-GLARE SURFACES
AVOID ROUGH SURFACES AND PROTRUDING OBJECTS
AVOID TOTAL SOUND ABSORPTION

INTERIOR SIGNS

LOCATE NEAR DOOR FRAME ON LATCH SIDE
LABEL USABLE FACILITIES WITH ♿ SYMBOL

LETTERING

LIGHT-ON-DARK PREFERRED
0.625 – 1" (16 - 25mm) HELVETICA TYPE (ALL CAPS)
RAISED 0.03" (1mm)
MAY BE ACCOMPANIED BY BRAILLE
SIGN HEIGHT 54 – 66" (1372 – 1676mm)

TELEPHONES

RECEIVER WITH VOLUME CONTROL
HANDSET CORD 36" (914mm) MIN.

WORK STATION

AVOID CENTER DRAWERS
24" (610mm) MIN. KNEE WELL WIDTH
AVOID SHARP EDGES AND CORNERS
NON-GLARE LIGHTING TO MINIMIZE FATIGUE

DOORS

60" (1524mm) CLEAR SPACE ON BOTH SIDES OF DOOR
SIDE – HUNG PREFERRED TO SLIDING TYPE
DOOR SHOULD OPEN INTO LOWER TRAFFIC AREA
GLASS SHOULD HAVE DECALS AT FACE HEIGHT
0.5" (13mm) MAX. THRESHOLD

FLOORS

NON – ABSORBENT MATERIALS IN WARM, DARK COLORS
AVOID COLOR CONTRAST EXCEPT TO DENOTE LEVEL CHANGE
AVOID SCULPTURED TEXTURES OR CHANGES IN DIRECTION OF GRAIN
THIN, HEAVY – DUTY UNPADDED LOOP PILE CARPETING PREFERRED
CARPETING SHOULD BE FIRMLY FIXED TO FLOOR

SEATING

ADJUSTABLE HEIGHT AND SUPPORT FOR LOWER BACK
(FEET SHOULD REST ON FLOOR OR OTHER SUPPORT)

STORAGE CABINETS

DRAWERS WITH ROLLERS FOR EASY OPERATION
U – SHAPED HANDLES: 4" x 1.5" (102mm x 38mm)
DRAWERS SHOULD BE OPERABLE WITH ONE HAND

SPECIFICATIONS ON THIS ILLUSTRATION SUGGEST IMPROVEMENTS TO WORKSITES WHICH WILL AID ABLE – BODIED AS WELL AS PERSONS WITH SENSORY OR LOWER EXTREMITY LIMITATIONS. CONSIDERATIONS FOR MORE SPECIFIC FUNCTIONAL LIMITATIONS ARE DESCRIBED ON TRANSPARENT OVERLAYS.

WORKSITE 1

WALLS

USE SLIP–RESISTANT, NON-GLARE SURFACES
AVOID ROUGH SURFACES AND PROTRUDING OBJECTS
AVOID TOTAL SOUND ABSORPTION

INTERIOR SIGNS

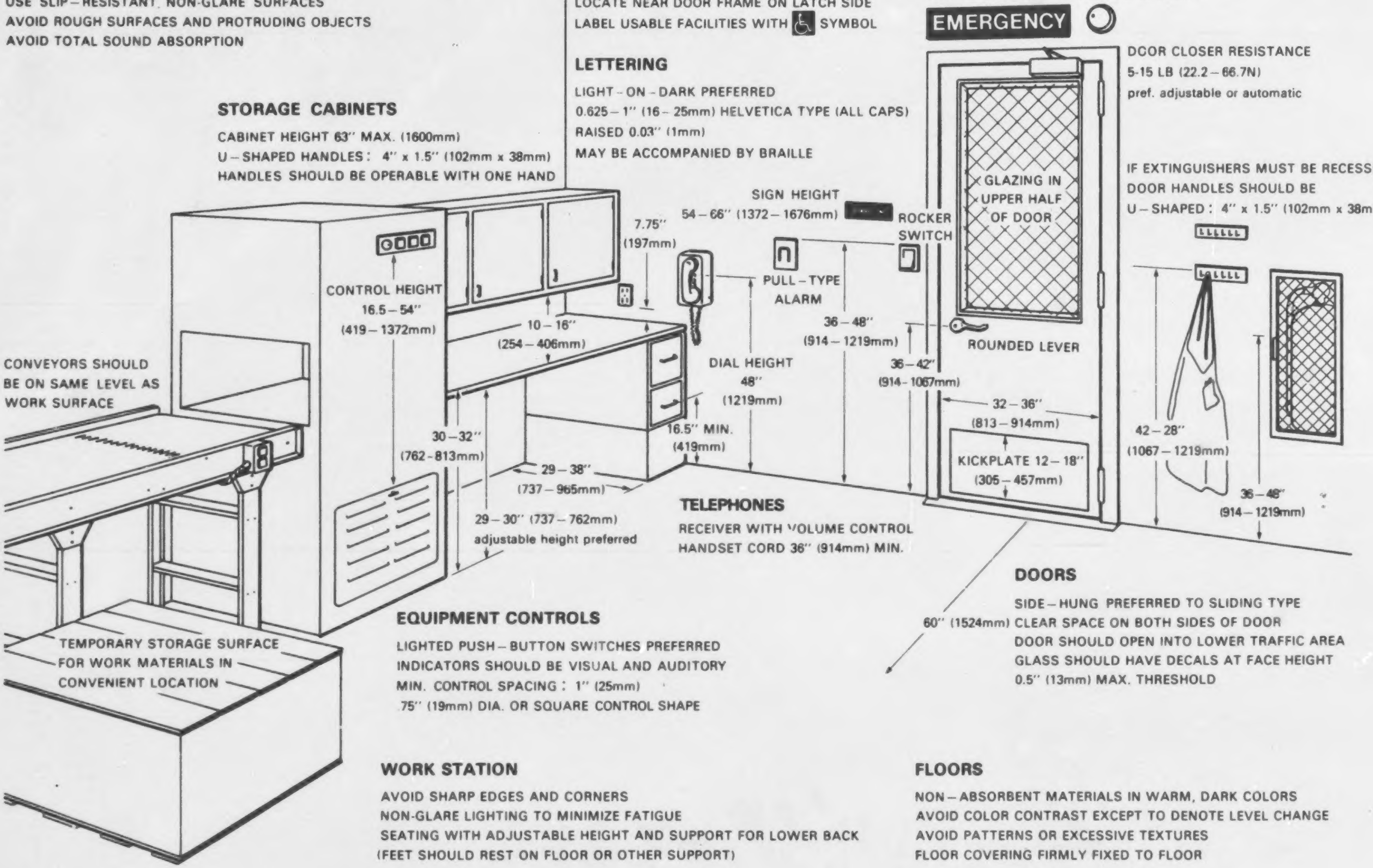
LOCATE NEAR DOOR FRAME ON LATCH SIDE
LABEL USABLE FACILITIES WITH ♿ SYMBOL

LETTERING

LIGHT–ON–DARK PREFERRED
0.625–1" (16–25mm) HELVETICA TYPE (ALL CAPS)
RAISED 0.03" (1mm)
MAY BE ACCOMPANIED BY BRAILLE

STORAGE CABINETS

CABINET HEIGHT 63" MAX. (1600mm)
U–SHAPED HANDLES: 4" x 1.5" (102mm x 38mm)
HANDLES SHOULD BE OPERABLE WITH ONE HAND


FLASHING VISUAL ALARM (less than 5 Hz)
8000 Hz AUDITORY ALARM (120 db max.)
EMERGENCY
DOOR CLOSER RESISTANCE
5-15 LB (22.2–66.7N)
pref. adjustable or automatic
IF EXTINGUISHERS MUST BE RECESSED,
DOOR HANDLES SHOULD BE
U–SHAPED: 4" x 1.5" (102mm x 38mm)
GLAZING IN UPPER HALF OF DOOR
SIGN HEIGHT
54–66" (1372–1676mm)
ROCKER SWITCH
7.75" (197mm)
PULL–TYPE ALARM
CONTROL HEIGHT
16.5–54" (419–1372mm)
10–16" (254–406mm)
DIAL HEIGHT
48" (1219mm)
36–48" (914–1219mm)
36–42" (914–1067mm)
ROUNDED LEVER
32–36" (813–914mm)
KICKPLATE 12–18" (305–457mm)
42–28" (1067–1219mm)
36–48" (914–1219mm)
CONVEYORS SHOULD BE ON SAME LEVEL AS WORK SURFACE
30–32" (762–813mm)
29–38" (737–965mm)
16.5" MIN. (419mm)
29–30" (737–762mm)
adjustable height preferred
60" (1524mm)
TEMPORARY STORAGE SURFACE FOR WORK MATERIALS IN CONVENIENT LOCATION

TELEPHONES

RECEIVER WITH VOLUME CONTROL
HANDSET CORD 36" (914mm) MIN.

EQUIPMENT CONTROLS

LIGHTED PUSH–BUTTON SWITCHES PREFERRED
INDICATORS SHOULD BE VISUAL AND AUDITORY
MIN. CONTROL SPACING: 1" (25mm)
.75" (19mm) DIA. OR SQUARE CONTROL SHAPE

DOORS

SIDE–HUNG PREFERRED TO SLIDING TYPE
60" (1524mm) CLEAR SPACE ON BOTH SIDES OF DOOR
DOOR SHOULD OPEN INTO LOWER TRAFFIC AREA
GLASS SHOULD HAVE DECALS AT FACE HEIGHT
0.5" (13mm) MAX. THRESHOLD

WORK STATION

AVOID SHARP EDGES AND CORNERS
NON-GLARE LIGHTING TO MINIMIZE FATIGUE
SEATING WITH ADJUSTABLE HEIGHT AND SUPPORT FOR LOWER BACK
(FEET SHOULD REST ON FLOOR OR OTHER SUPPORT)

FLOORS

NON–ABSORBENT MATERIALS IN WARM, DARK COLORS
AVOID COLOR CONTRAST EXCEPT TO DENOTE LEVEL CHANGE
AVOID PATTERNS OR EXCESSIVE TEXTURES
FLOOR COVERING FIRMLY FIXED TO FLOOR

SPECIFICATIONS ON THIS ILLUSTRATION SUGGEST IMPROVEMENTS TO WORKSITES WHICH WILL AID ABLE–BODIED AS WELL AS PERSONS WITH SENSORY OR LOWER EXTREMITY LIMITATIONS. CONSIDERATIONS FOR MORE SPECIFIC FUNCTIONAL LIMITATIONS ARE DESCRIBED ON TRANSPARENT OVERLAYS.

WORKSITE 2

DENTAL TECHNICIAN WORKSITE

Photograph courtesy of the
Innovative Services Office,
Portland, Oregon

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DENTAL TECHNICIAN WORKSITE

DEVELOPER

Dept. of Human Resources
Vocational Rehab. Div.
Innovative Services Office
2125 S.W. Fourth, Telco Bldg.
Portland, OR 97201

CONTACT PERSON

James Mueller
Job Development Lab.
The George Washington University
2300 Eye St., N.W.
Washington, D.C. 20037
(202) 676-3847

WHERE IT IS USED

Health

PROBLEM(S) IT OVERCOMES

mobility impairment due to spinal cord injury

FIELD TESTED

yes

used in one lab

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

not applicable

FOR SALE

not applicable

HOW IT WORKS

Previously the work surface was above a cabinet which extended from the floor to the top of the work surface. The main modification was to remove the cabinet except for the drawer. This allows the technician's wheelchair to fit under the work surface, permitting the worker to reach his or her work easily.

(Information provided by James Mueller.)

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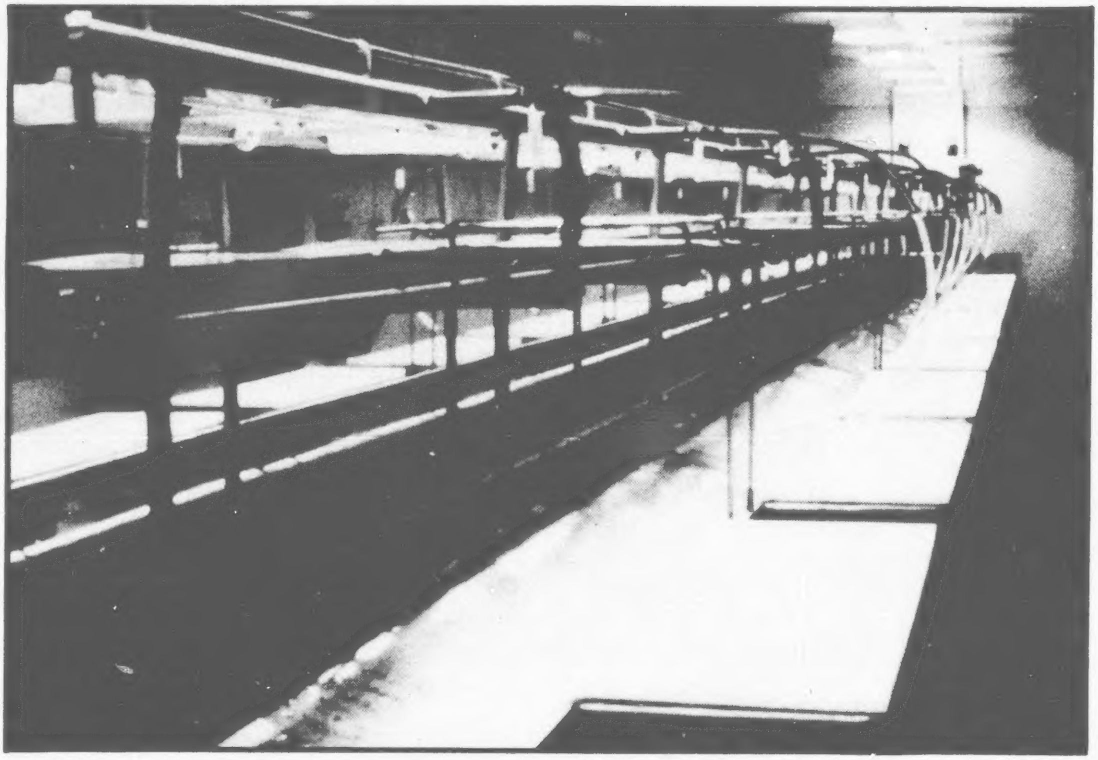
FISH PROCESSING: PREPARATION LINE



666

Photograph courtesy of the
Innovative Services Office,
Portland, Oregon

FISH PROCESSING: PREPARATION LINE

DEVELOPER

Dept. of Human Resources
Vocational Rehab. Div.
Innovative Services Office
2125 S.W. Fourth, Telco Bldg.
Portland, OR 97201

CONTACT PERSON

James Mueller
Job Development Laboratory
The George Washington Univ.
2300 Eye St., N.W.
Washington, D.C, 20037
(202) 676-3847

WHERE IT IS USED

Fish Processing

PROBLEM(S) IT OVERCOMES

reach impairment and weak grasp

FIELD TESTED

yes

used in one fish processing plant

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

not applicable

FOR SALE

not applicable

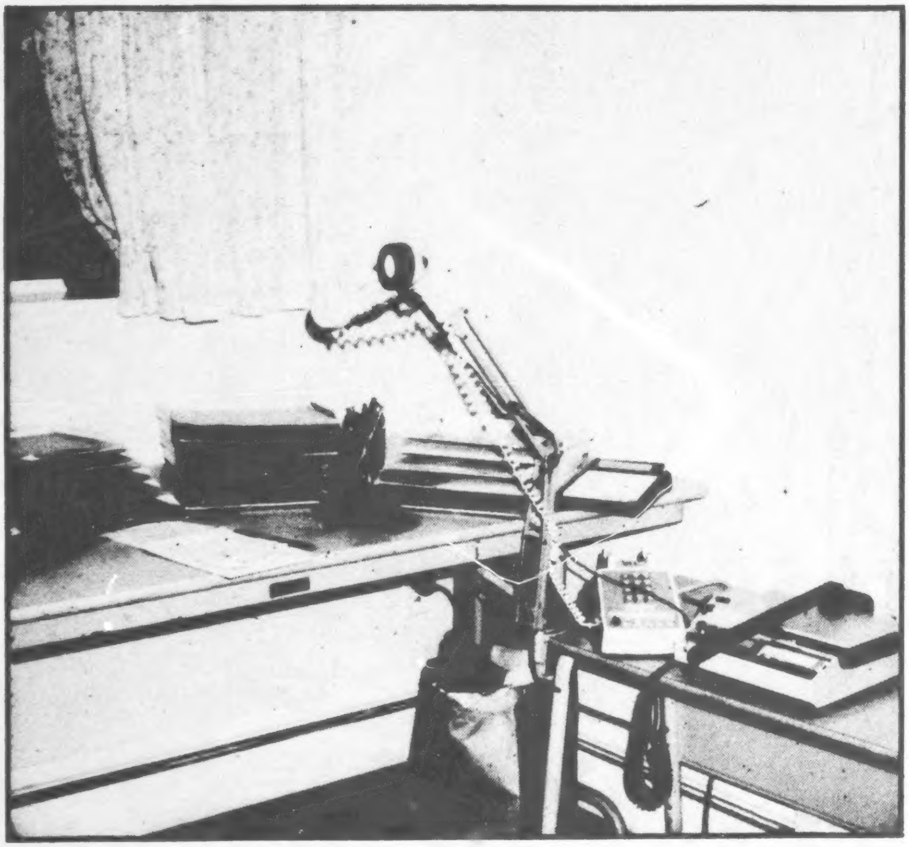
HOW IT WORKS

Previously, the work surface consisted of small individual chopping blocks. These were replaced by large chopping blocks which allow the fish to slide easily. A mechanical reacher (see catalog entries) was also used by the disabled employee.

(Information provided by James Mueller.)

667

INSURANCE CLAIMS ADJUSTER HOME WORKSITE



Photograph courtesy of the
Job Development Laboratory

INSURANCE CLAIMS ADJUSTER HOME WORKSITE

DEVELOPER

Job Development Laboratory
The George Washington Univ.
2300 Eye St., N.W.
Washington, D.C. 20037
(202) 676-3847

CONTACT PERSON

James Mueller
Job Development Laboratory
The George Washington Univ.
2300 Eye St., N.W.
Washington, D.C. 20037
(202) 676-3847

WHERE IT IS USED

Business Office
Professional

PROBLEM(S) IT OVERCOMES

mobility and strength impairments due to spinal cord injury

FIELD TESTED

yes

used for one claims adjuster

REGULATORY APPROVAL

information not available

WARRANTY PROVIDED

not applicable

FOR SALE

not applicable

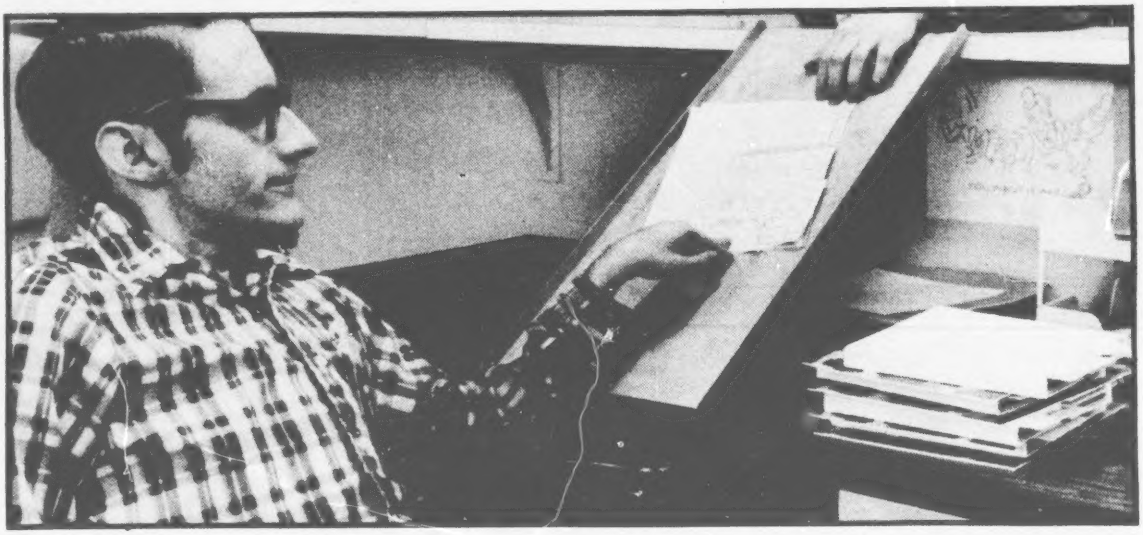
HOW IT WORKS

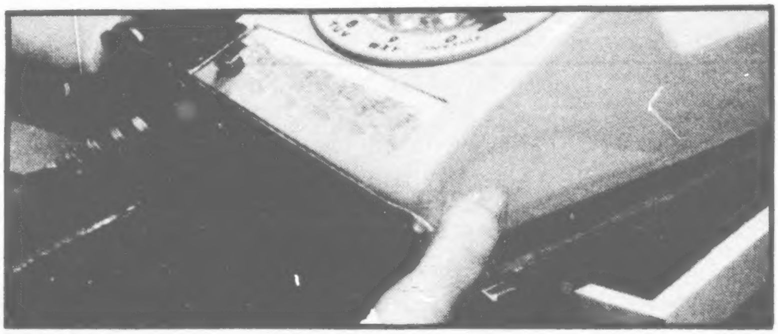
Major changes here include:

1) a lever added to the dictabelt machine in order to make the buttons easier to use;
2) a Luxo arm addition to the phone;
3) two separate work heights, one to clear the wheelchair, and the other to hold the equipment;
4) a desktop filing system.

(Information provided by James Mueller.)

PERSONNEL STATISTICIAN





Photographs courtesy of
Pratt and Whitney

PERSONNEL STATISTICIAN

DEVELOPER

Pratt and Whitney Aircraft Group
Manufacturing Division
East Hartford, CT 06108

CONTACT PERSON

A.R. Colby
Manager of EEO Programs
Pratt and Whitney Aircraft Group
Manufacturing Division
East Hartford, CT 06108

WHERE IT IS USED

Personnel

PROBLEM(S) IT OVERCOMES

dexterity and mobility problems caused by arthrogryposis

FIELD TESTED

not applicable

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

no

HOW IT WORKS

On the job, this employee has little more trouble functioning than employees without disabilities. A few devices, such as those shown on the facing page, are simple, but mean the difference between the ability to work and unemployment. Because the "hold" button on his telephone is spring loaded and thus more difficult to push down than the other buttons, the company has provided the simple leverage device attached, allowing him to handle several calls as they come in. He has devised a simple scissors like tool (not shown) he uses for everything from picking up things he's dropped to straightening piles of paperwork on counters just out of his reach. When he first came to work at P&WA, he found it difficult to reach items placed on the counter by job applicants. The company installed a chute to ease the difficulty. Now, he has gotten to the point where he doesn't need the chute, although it is a convenience.

(Information based on literature provided by A.R. Colby.)

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PHOTOGRAPHIC EQUIPMENT

Photograph not available

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PHOTOGRAPHIC EQUIPMENT

DEVELOPER

Prof. Cavalliere Ketchum
Art Department
University of Wisconsin-
Madison
6271 Humanities Building
Madison, WI 53706
(608) 262-6598

CONTACT PERSON

Same as Developer

WHERE IT IS USED

Photography

PROBLEM(S) IT OVERCOMES

limited reach; limited hand and arm movement

FIELD TESTED

yes

used by one student

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

May be made at a minimal cost.

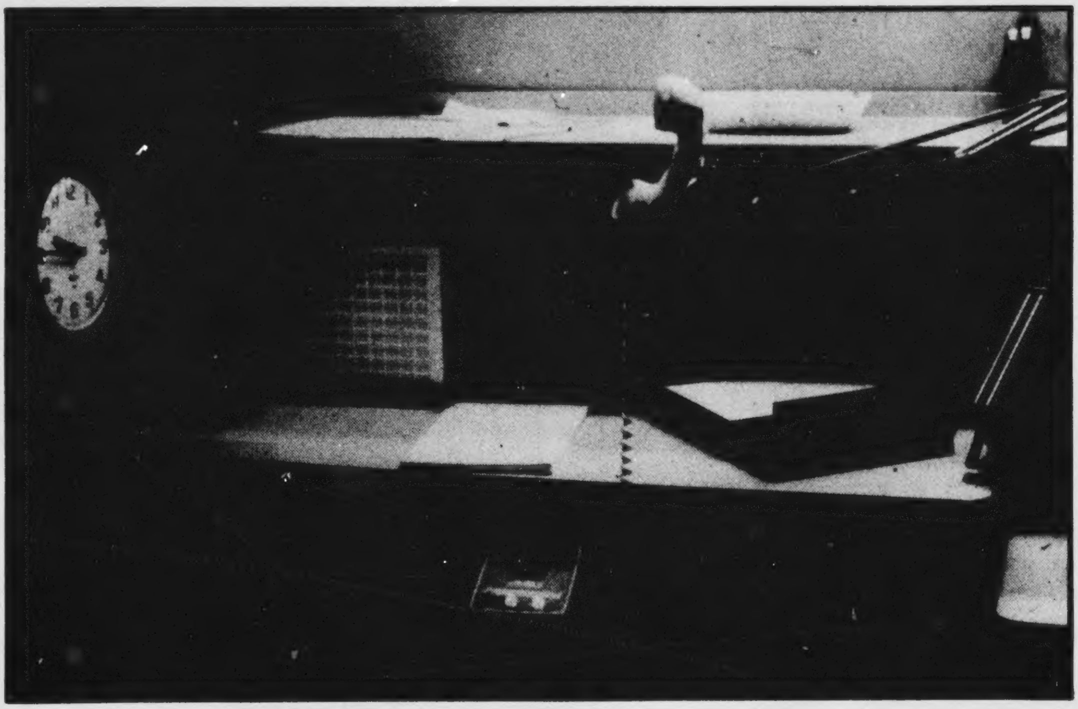
HOW IT WORKS

Professor Ketchum has modified various pieces of photographic eqiupment. To adapt an enlarger for a student who has limited arm and hand movement and reach range, he replaced the focus and adjusting knobs with a toggle nut with a tapered end. A handle was made by cutting down a golf club and attaching the top of a ratchet wrench to it. He also found that a towel hook with a suction cup could be used as a tripod. A small hole was drilled at the top of the towel hook for a screw. The towel hook easily goes onto any surface and a camera can be mounted atop the projecting screw.

By working with his students who need adaptations, Professor Ketchum has devised several simple and inexpensive changes for them. He is willing to explain the modifications he has made and to help others make adaptations for their own needs.

(Information based on personal interview.)

TELEPHONE SURVEY CLERK WORKSITE



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Photograph courtesy of The
Job Development Laboratory

TELEPHONE SURVEY CLERK WORKSITE

DEVELOPER

Job Development Laboratory
The George Washington Univ.
2300 Eye St., N.W.
Washington, D.C. 20037
(202) 676-3847

CONTACT PERSON

James Mueller
Job Development Laboratory
The George Washington Univ.
2300 Eye St., N.W.
Washington, D.C. 20037
(202) 676-3847

WHERE IT IS USED

Office Settings

PROBLEM(S) IT OVERCOMES

weakness resulting from muscular dystrophy

FIELD TESTED

yes

used in one office

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

not applicable

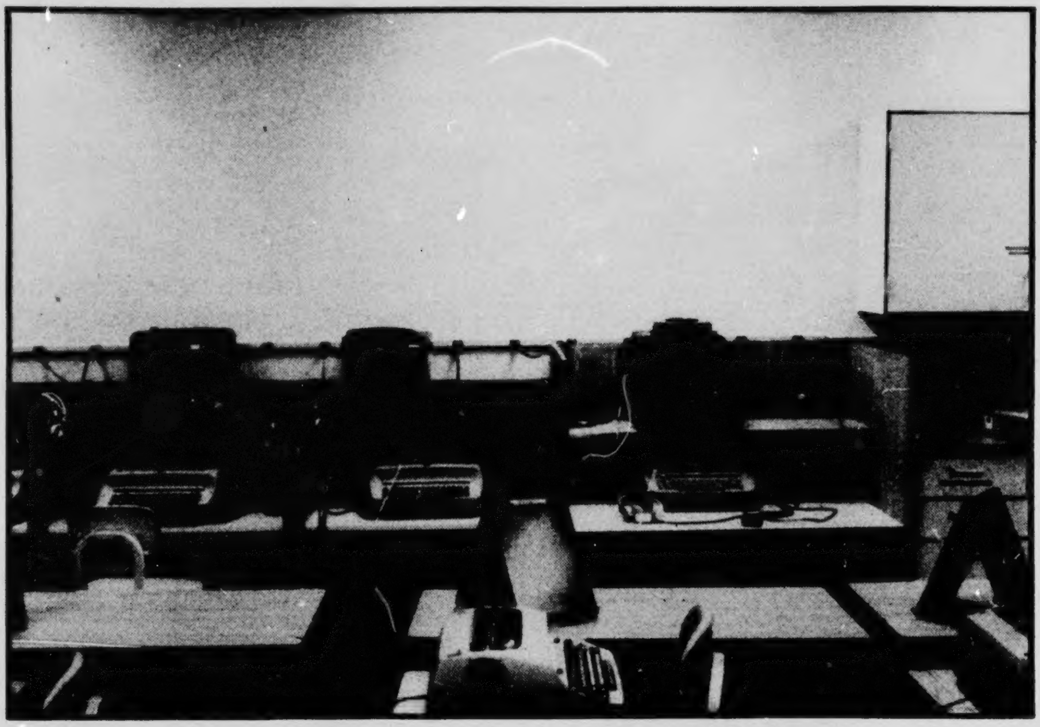
HOW IT WORKS

The main modifications in this work site include:

1) a height-adjustable work surface;
2) a phone suspended under the work table so that the buttons can be reached more easily;
3) a Luxo arm for the telephone receiver.

(Information provided by James Mueller.)

WORK AREA



Far right section has been modified.

WORK AREA

DEVELOPER

Group Effort by Some
Wisconsin Indianhead
Technical Institute
New Richmond Staff
1019 South Knowles Ave.
New Richmond, WI 54017
(715) 246-6561

CONTACT PERSON

Jeanette M. Richardson,
Supervisor
Office & Marketing
Education Department
Address and Phone Number
Same as Developer

WHERE IT IS USED

Work Site

PROBLEM(S) IT OVERCOMES

extra space for wheelchair

FIELD TESTED

yes

in use at WITI - New Richmond

REGULATORY APPROVAL

not applicable

WARRANTY PROVIDED

not applicable

FOR SALE

not applicable

HOW IT WORKS

This is an example of how a few extra inches in a work site area make available space for a wheelchair, yet, does not effect the usefulness or esthetic value of the room.

(Information based on personal interview.)

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Appendix B

Additional Available Resources

In this appendix is a suggested listing of resources where the reader can obtain information on other available products. Please be aware that this is not an exhaustive list.

Art

Art Studios
927 E. Oakton Street
Elk Grove, IL 60007
(312) 593-6060

A Handicapped Potter's Wheel is available which was developed by Pottery Equipment, Inc., Silt, CO 81652, (303) 876-2935.

AUTOMOTIVE HAND CONTROLS

Blatnik Precision Controls
1523 Cota Avenue
Long Beach, CA 90813
(213) 436-3275

Braun Corporation
1014 S. Monticello
Winamac, IN 46996
(219) 946-6157
other offices: 13710 49th Street North
Clearwater, FL 33520
(813) 576-2737

3651 Sausalito Street
Los Alamitos, CA 90720
(714) 891-4305

Creative Controls, Inc.
1354B Combermere
Troy, MI 48084
(313) 585-0985

Company has wheelchair restraints and servo (remote operation) hand controls.

Die-A-Matic, Inc.
4004 Fifth Road North
Arlington, VA 22202
(703) 522-3838

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Company handles the System Franz controls for the Volkswagen Rabbit and handles and installs Gresham Driving Aids.

Drive-Master Corporation
16 Andrews Drive
West Paterson, NY 07424
(201) 785-2204

Ferguson Auto Service
1112 N. Sheppard Street
Richmond, VA 23230
(804) 358-0800

Handicaps Inc.
4335 S. Santa Fe Drive
Englewood, CO 80110
(303) 781-2062

Manufacturing and Production Services
4664 Mercury Street
San Diego, CA 92111
(714) 292-1423

Mobility Products and Design, Inc.
709 Kentucky Street
Vallejo, CA 94590
(707) 642-8967

Mobility Systems
715 S. 5th Avenue
Maywood, IL 60153
(312) 344-2705

Nelson Medical Products
5690 Sarah Avenue
Sarasota, FL 33583
(813) 924-2058

Smith's Hand Control
1420 Brookhaven Drive
Southhaven, MS 38671
(601) 393-0540

Trujillo Industries
5040 Firestone Boulevard
South Gate, CA 90280
(213) 564-7943

Only manufactures steering assists.

CLOTHING

Amputee Shoe and Glove Exchange
Dr. and Mrs. R.E. Wainerdi
1635 Warwickshire Drive
Houston, TX 77077

A free information exchange to pair people who need the opposite shoe or glove and are of the same age, size and have similar taste.

Promote Real Independence for the
Disabled and Elderly
Fashions by PRIDE
Sew With PRIDE
1159 Poquonnock Road
Groton, CT 06340
(203) 447-7433

Clothing patterns are available which have been designed and tested for children and adults. Available on loan from P.R.I.D.E. is a Travel Trunk show. This is a trunk containing 150 garments which have been custom designed or altered in some way to meet a special need. Sew With PRIDE is a manual of sewing skills for changing store bought clothing. Step-by-step instructions in large type are accompanied by sketches. (Also see: Classroom Material.)

Vocational Guidance and Rehabilitation Services
Wings of VGRS
2239 E. 55th Street
Cleveland, OH 44103
(216) 431-7800

In the catalog, Wings of VGRS are sketches, descriptions and ordering information on adapted clothing for women and men. Items can be custom ordered.

COMMUNICATION AIDS

FM Atlas
4515 Avenue E
Kearney, NE 68847
(308) 237-7953

This electronics mail order company supplies equipment for an FM subcarrier signal. Circuits are available to tune into SCA (Subsidiary Communications Authorization, in Canada SCMO), a signal used for such programs as talking books and medical news.

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COOKING

Amana Refrigeration, Inc.
Amana, IA 52204
(319) 622-5511

A Braille Kit has been designed for Radarange Ovens, (models RR-8B and RR-7B). The kit includes Braille-marked polyester overlays that fit over the timer and power level dials. It also includes audio cassette tapes which are voice indexed to the information. A "Use and Care Manual", general cooking guidelines, instructions for preparing frozen and convenience foods and recipes are recorded on the tapes.

P.R.I.D.E. Foundation
1159 Poquonnock Road
Groton, CT 06340
(203) 447-7433

Special tools and devices have been developed and tested to assist people with food preparation and general home management. (Also see: Classroom Materials.)

Rival Manufacturing, Co.
36th and Bennington
Kansas City, MO 64129
(816) 861-1000
Telex 42-4126

The "Crock-Pot" slow cooker features easy to turn phenolic knobs of a no heat quality. Available is a 11 1/2" x 11" Braille edition of the "Crock-Pot" cookbook. It is made available through a volunteer project of: Braille Committee, Beth Shalom Sisterhood, 8831 Emsley Lane, Leawood, KS 66206, (816) 531-4535

Schwab Rehabilitation Hospital
1401 S. California
Chicago, IL 60608
(312) 552-2010

The following suggestion was found in "Rehab Bits", a set of cards with independent living tips, no longer available. Place a large mirror at a 45 degree angle above the stove. A person in a wheelchair can then check the progress of cooking food by looking up into the mirror.

ENVIRONMENTAL CONTROL SYSTEMS

Fidelity Electronics, Ltd.
8800 N.W. 36th Street
Miami, FL 33178
(305) 888-1000

Maddak, Inc.
Pequannock, NJ 07440
(201) 694-0500

Medical Equipment Distributors, Inc.
1701 S. First Avenue
Maywood, IL 60153
(312) 681-2828

Two environmental control systems are available from MED, the MED Quad System and the Micro-Dec.

INDEPENDENT LIVING AIDS

FashionAble
Rocky Hill, NJ 08553
(609) 921-2563

Many self help items are available through their mail order catalog. FashionAble does not manufacture products.

Grayline Housewares
1616 Berkley Street
Elgin, IL 60120
(312) 695-3900

Company has space saving items useful at home and at work. Items include carrying caddies, stackable baskets and dish racks. Most of the products have a vinyl finish.

Help Yourself Aids
Box 15
Brookfield, IL 60513

J.A. Preston Corporation
71 5th Avenue
New York, NY 10003
(212) 255-8484

Their catalogs of equipment for health care and rehabilitation and the special education catalog contain items under such categories as perceptual motor, self help aids, communications, wheelchairs and lifters.

Lamson and Goodnow Manufacturing Company
Shelburne Falls, MA 01370
(413) 625-6331

Company manufactures a pronged knife which can serve as both knife and fork.

Oxford Regional Health Authority
"Equipment for the Disabled"
Department H.A.I.
Foredown Drive
Portslade
Brighton BN4 2BB England

In the series are included the following topics: communication, clothing and dressing for adults, home management, personal care, leisure and gardening, housing and furniture, hoists and walking aids, wheelchair and outdoor transport, writing and reading aids for the paralyzed.

P.R.I.D.E. Foundation
1159 Poquonnock Road
Groton, CT 06340
(203) 447-7433

A variety of items are available to assist the user with food preparation, cleaning and grooming. (Also see: Classroom Material.)

Worcester Manufacturing Company
111 W. Timonium Road
Timonium, MD 21093
(301) 252-0055

Company has wire made products useful at home and at work. Items include study stands, letter trays and hangers.

MECHANICAL "REACH ASSISTERS"

Fred Sammons, Inc.
Box 32
Brookfield, IL 60513
(312) 971-0610

OPTICAL

American Thermo-Ware Company
16 Warren Street
New York, NY 10007
(212) 267-1126

Several types of magnifying glasses are available through ATCO.

Bausch & Lomb
Magnifiers Catalog
P.O. Box 478, Dept. 3219
Rochester, NY 14602
(800) 828-1430
NY (800) 462-4893

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Catalog gives an explanation of each type of magnifier as well as a glossary of terms.

Designs for Vision, Inc.
Optical Aids for the Partially Sighted
120 E. 23rd Street
New York, NY 10010
(800) 221-3476
(212) 674-0600
Telex 238413 DVI UR

The catalog gives a general explanation of each type of optic and explanation of fitting and lists the powers available.

Franel Optical Supply Co.
Gadgets and Things for the Optical Trade
P.O. Box 96
Maitland, FL 32751
(800) 327-2070
Orlando (305) 831-4000 Florida (800) 432-3770

This catalog, though geared for the "optical trade", contains a section on vision aids including magnifiers and prisms.

Keeler Optical Products Inc.
456 Parkway
Lawrence Park Industrial District
Broomall, PA 19008
(800) 523-5620
(215) 353-4350

North Central Sales Office
909 Chippewa Circle
Carpentersville, IL 60110
(800) 523-5620
(312) 428-0440

Company has Low Vision Aids.

ORGANIZERS

Grayline Housewares
1616 Berkley Street
Elgin, IL 60120
(312) 695-3900

Company has vinyl finished products such as stackable baskets and caddies useful at home and at work.

Worcester Manufacturing Company
111 W. Timonium Road
Timonium, MD 21093
(301) 252-0055

Company has wire made products such as desk trays, book rests and copyholders useful at home and at work.

READING

Dialogue with the Blind
3100 S. Oak Park Avenue
Berwyn, IL 60402
(312) 749-1908

Dialogue developed mailing containers for cassettes and open reel tapes which they sell. They also sell rubber stamps, mailing labels and cassette storage boxes obtained from other sources. Dialogue Magazine is published by this organization. (See: Publications.)

General Hardware Manufacturing Co., Inc.
New York, NY 10013

An inexpensive, ($1.49, Stock no. 385), page turner for persons who do not have manipulative use of their fingers, but can grasp or attach a pencil-like device to any holder and have limited arm movement. Attach paper clips to side edges of pages in a sequential staggered pattern, for use with a magnetic pickup tool, shaped like a pencil. Idea from Wisconsin's DVR Newsletter, April, 1980.

Pelco Sales, Inc.
351 E. Alondra Boulevard
Gardena, CA 90248
(213) 321-5591

The Pelco Electronic Visual Aid is a protable television system which enlarges images 7 to 43 times their original size.

Touch Turner
443 View Ridge Drive
Everett, WA 98203
(206) 252-1541

Page turning devices which operate on batteries are available for hardback and paperback books.

SCIENCE

Conco Industries, Inc.
30 Water Street
West Haven, CT 06516
(203) 934-5271

Company has designed a portable science station for physically handicapped people.

SENSORY AIDS

American Foundation for the Blind
Sensory Aids for Employment of Blind and Visually Impaired Persons: A Resource Guide
15 West 16th Street
New York, NY 10011
(212) 620-2000

This guide, compiled by Sensory Aids Foundation and published by AFB, is available in print and braille. It contains photographs, descriptions and vendor addresses of products modified for people who are visually impaired. (Also see: Classroom Material; Organizations.)

Deutsche Blindenstudienanstalt
Aids for the Blind
D-3550 Marburg 1
Am Schlag 8
P.O. B. 1160
Germany
64 051

This catalog, available in German and English, describes various products designed for people who are blind. Products include printing presses, typewriters, drawing instruments and recording equipment.

TACTILE AND BRAILLE SIGNS

Diversified Enterprises
5584 Willow Highway
Grand Ledge, MI 48837
(517) 627-3137

Company has plates with individual raised and or braille letters and numerals, and plaques, directories and signs.

Scott Plastics Company
P.O. Box 2958
Sarasota, FL 33578
(813) 355-5171

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Company has developed fonts with individual braille characters on each font called Brailletter^R. They also carry individual raised letters for use indoors and outdoors.

TELEPHONE AIDS

AAL Communications, Inc.
Box 365
Urbana, IL 61801
(217) 367-7373

Company manufactures and distributes a stationary teleprinter.

Acoustic Couplers are available from:

Applied Communicatons Corporation
P.O. Box 55
Belmont, CA 94002
(415) 592-1622

Phone-TTY, Inc.
14-25 Plaza Road
Fair Lawn, NJ 07410
(201) 796-5414

SACCO-Silent Aids Communication Corporation
P.O. Box 1727
Washington, DC 20013

Fred Sammons, Inc.
Box 32
Brookfield, IL 60513
(312) 971-0610

Infolink Corporation
1925 Holste
Northbrook, IL 60062
(312) 291-2900

Available from this company is an electrowriter.

Interpretive Systems Corporation
6950 Oslo Circle
Suite F
Buena Park, CA 90621

Company manufactures and distributes a device that provides printed copy on standard paper.

Krown Research
1917 Greenfield Avenue
Los Angeles, CA 90025

Company manufactures and distributes a Porta-Printer.

Local Bell Telephone

Many standard services already meet special needs. There are also services developed to help people who have a hearing, sight, speech or motion impairment. Description of services contained in booklet Services for Special Needs.

Magsat Corporation
180 Roberts Street
Hartford, CT 06106
(203) 525-4238

Company manufactures and distributes portable teleprinters.

Phonics Corporation
814 Thayer Avenue
Silver Spring, MD 20910
(301) 588-8222

Company manufactures and distributes a TV Phone which is a semi-portable unit.

P.R.I.D.E. Foundation
1159 Poquonnock Road
Groton, CT 06340
(203) 447-7433

Telautograph Corporation
8700 Bellanca Avenue
Los Angeles, CA 90045
(213) 641-3690

Available from this company is a telepen.

Teletype Corporation
90 Clinton Road
Fairfield, NJ 07006
(201) 575-8240

Company manufactures and distributes a teletypewriter.

TYPEWRITERS

International Business Machines Corporation
Modifications to the I.B.M. Mag Card Selectric Typewriter and 2741 Communication Terminal for Braille Translation and Embossing by N.C. Loeber (1976)

This booklet describes an experimental device that can simply and directly produce a document in either braille or inkprint. I.B.M. equipment is used to transliterate braille code to English (or other languages) and vice versa. This process provides the means for a two-way written communication between the visually impaired and sighted communities.

WRITING

Boston-Parkway Lions Club
81 Corey Street
West Roxbury, MA 02132

The Banks Pocket Braille Writer, distributed world wide by Lions Clubs, prints braille on a narrow paper tape using a six key keyboard.

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Appendix C

Organizations

People who are handicapped are served by many organizations in various capacities. This appendix lists some of these organizations and their functions. (It is not an exhaustive list.) Some of the national organizations have state chapters. Chapter information can be obtained from the national office. State, regional or local offices may be listed in your city phone book.

Accent on Information (AOI)
P.O. Box 700
Bloomington, IL 61701
(309) 378-2961

AOI is a computerized retrieval system of information on products and devices which assist disabled persons in such areas as grooming, furniture, home management, mobility, written and oral communication. Two types of information are available: references to publications, including sources, and brief descriptions of equipment with addresses of manufacturers and distributors. For a fee, searches of the AOI system are made on specific topics. AOI also produces publications providing information on new products. (See: Publications.)

Alexander Graham Bell Association
for the Deaf, Inc.
1537 35th Street, N.W.
Washington, DC 20007
(202) 337-5220

American Association for the Advancement
of Science (AAAS)
Project on the Handicapped in Science
1776 Massachusetts Avenue, N.W.
Washington, DC 20036
(202) 467-4400

AAAS Project on the Handicapped in Science (PHS) promotes opportunities in science for people who are handicapped. PHS is an advocacy and information resource service for professionals and students of science who are handicapped. (Also see: Classroom Material; Publications.)

American Foundation for the Blind (AFB)
15 W. 16th Street
New York, NY 10011
(212) 620-2000

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AFB
1660 L Street, NW
Washington, DC 20036
(202) 467-5996

AFB
500 N. Michigan Avenue
Chicago, IL 60611
(312) 321-1880

AFB
100 Peachtree Street
Atlanta, GA 30303
(404) 525-2303

AFB
1860 Lincoln Street
Denver, CO 80203
(303) 861-9355

AFB
760 Market Street
San Francisco, CA 94102
(415) 392-4845

AFB has consultant staff who work in the areas of children and youth; rehabilitation, orientation and mobility; employment; low vision; aging; radio information services; special population groups and recreation. Their headquarters are in New York and Washington, D.C. in addition to the four regional offices listed above. (Also see: Additional Available Resources; Classroom Material.)

American Parkinson Disease Association
147 E. 50th Street
New York, NY 10022
(212) 421-5890

American Speech and Hearing Association
10801 Rockville Pike
Rockville, MD 20852
(301) 897-5700

Amyotrophic Lateral Sclerosis
Society of America
15300 Ventura Blvd., Suite 315
Sherman Oaks, CA 91403
(213) 990-2151

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Arthritis Foundation
211 Park Avenue South
New York, NY 10003
(212) 677-5790

Association for Children with Learning
Disabilities (ACLD)
4156 Library Road
Pittsburgh, PA 15234
(412) 341-1515

A national organization of parents and professionals. ACLD's vocational committee studies and promotes vocational needs of people who are learning disabled.

Association for the Education of the Visually
Handicapped
919 Walnut Street
Philadelphia, PA 19107
(215) 923-7555

Provides materials and information for people who are visually handicapped.

The Association for the Severely Handicapped (TASH)
Information Department
1600 W. Armory Way
Seattle, WA 98119
(206) 283-5055

Information and materials requests on all aspects of education and services for people who are severely handicapped are answered by TASH's Information Department. TASH maintains a library of resource materials. The Information Department also conducts surveys of integrated schools and parent needs.

Center for Labor Research & Studies
Job-Related Physical Capacities
Research Project (JRPC)
Florida International University -
Tamiami Campus
Miami, FL 33199
(305) 552-2768

JRPC comparison system, is an interactive computer system used in conjunction with already existing computerized career information. A person uses the system to explore interest areas and in addition is evaluated by a physician using a JRPC format to analyze the individual's physical capacities for 98 different activities, e.g. walking, lifting, reaching. Ratings on these capacities are then fed into the computer. Jobs in which the individual has expressed an interest, (or all jobs meeting the person's physical specifications), are produced on the screen or print-out. The jobs are described in the same terms as the physical capacities which the physician rated. The kind of information a person receives includes a listing of the physical capacities necessary for the performance of a job, the percentage of people working at that job, (from JRPC field sample), who say that his or her capacities would be sufficient, number of hours per day one might expect to use that capacity and aids which are easily available to help overcome a specific functional handicap at the worksite. (Also see Publications.)

Council for Exceptional Children (CEC)
1920 Association Drive
Reston, VA 22091
(800) 336-3728
(703) 620-3660

CEC is a professional association interested in the educational needs of all exceptional children. CEC operates the Educational Resources Information Center, (ERIC) Clearinghouse on Handicapped and Gifted Children. The Clearinghouse has bibliographies and abstracts in such areas as program accessibility for handicapped students. Brochures are available describing the association's services and publications.

Electronic Industries Foundation (EIF)
Project With Industry
2001 Eye Street, NW
Washington, DC 20006
(202) 457-4913

EIF has developed a program to train people who are handicapped to work in the electronic industries. Rehabilitation resources and industries work together to identify, train and place potential employees. Currently area EIF offices are located in Los Angeles, San Francisco and Massachusetts.

Epilepsy Foundation of America
1828 L Street, N.W.
Washington, DC 20036
(202) 293-2930

Handy-Cap Horizons, Inc.
3250 E. Loretta Drive
Indianapolis, IN 46227
(317) 784-5777

A travel club which arranges group tours around the world for handicapped and elderly people.

Helen Keller National Center
for Deaf-Blind Youths and Adults
111 Middle Neck Road
Sands Point, NY 11050
(516) 944-8900

Industrial Home for the Blind operates the Center to provide evaluative and rehabilitative services to deaf-blind youths and adults in a residential setting. Reprints of articles of research on sensory aids conducted by the Center are available to inquirers. (Also see: Publications.)

Impart
Impart Demonstration Center
Bexar County Easter Seal Center
2203 Babcock Road
San Antonio, TX 78229
(512) 699-8988

Texas Rehabilitation Commission
118 E. Riverside Drive
Austin, TX 78704
(512) 447-0100

Innovative Matching of Problems to Available Rehabilitation Technology (Impart), has engineers who help handicapped individuals make use of advanced technology. Engineers are located at the Texas Rehabilitation Commission and the Southwest Research Institute Applied Rehabilitation Engineering Center in San Antonio. Impart helps people to overcome difficulties encountered at the worksite and at home by locating existing adapted technology or creating new items. This service is available to any person who is vocationally handicapped and to individuals and agencies working with handicapped people.

International Association of Laryngectomees
American Cancer Society
777 Third Avenue
New York, NY 10017
(212) 371-2900

International Association of
Parents of the Deaf
814 Thayer Avenue
Silver Spring, MD 20910
(301) 585-5400

Just One Break (J.O.B.)
373 Park Avenue South
New York, NY 10026
(212) 725-2500

J.O.B. is a job placement agency for people who are physically disabled. Free of charge, J.O.B. applicants receive skill testing, vocational evaluation and a 90 day follow-up after placement. These services are available to potential employees and employers in the N.Y.C. metropolitan area. In addition, J.O.B. conducts research and demonstration projects, provides training seminars and distributes printed material.

Library of Congress
Division for the Blind and
 Physically Handicapped (DBPH)
Washington, DC 20542
(202) 287-5100

The library maintains a collection of reading matter in braille and recorded form which is loaned free of charge to individuals unable to hold, handle or read conventional printed matter. Listening equipment, including attachments such as speed controls, are also loaned to eligible individuals. DBPH produces two publications which announce new books released, have feature articles and give information on library programs. The publications are Talking Book Topics, available in print and flexible disc, and Braille Book Review, available in print and braille. Reference circulars, available from DBPH, provide information on subjects relevant to blindness and physical handicaps. (See: Publications.) The Library of Congress works with a network of cooperating local libraries to distribute reading material and equipment. Many local libraries maintain their own special materials collection. Contact your local library for more details.

Mainstream, Inc.
1200 15th Street, NW
Washington, DC 20005
(800) 424-8089 also for TTY
(202) 833-1136

This organization provides information on federal laws and regulations concerning employment and education of handicapped people. Their hotline, equipped with a TTY, is answered by people who will provide information to questions on compliance with affirmative action regulations. If unable to answer questions, a confidential referral is made to the appropriate federal office. Mainstream produces a series of publications and sponsors conferences on issues regarding rights of handicapped persons.

Muscular Dystrophy Associations
 of America, Inc.
810 Seventh Avenue
New York, NY 10019
(212) 586-0808

Myasthenia Gravis Foundation, Inc.
15 E. 26th Street
New York, NY 10010
(212) 889-8157

National Amputation Foundation
12-45 150 Street
Whitestone, Long Island, NY 11357
(212) 767-8400

National Association for Retarded Citizens
2709 Avenue 'E' East
Arlington, TX 76011
(817) 261-4961

National Association for Visually Handicapped (NAVH)
305 E. 24th Street
New York, NY 10010
(212) 889-3141
and
3201 Balboa Street
San Francisco, CA 94121
(415) 221-3201

NAVH provides publications (see: Publications); adult and youth services including group programs, counseling to families and programs for the elderly; parent discussion groups; professional and public education; field testing of optical aids in cooperation with manufacturers and information and referral to community services.

National Association of the Deaf
814 Thayer Avenue
Silver Spring, MD 20910
(301) 587-1788

National Braille Association
85 Godwin Avenue
Midland Park, NJ 08432
(201) 447-1484

Recorded, large print and braille materials are available through this association.

National Easter Seal Society
for Crippled Children and Adults
2023 W. Ogden Avenue
Chicago, IL 60612
(312) 243-8400

National Federation of the Blind
1800 Johnson Street
Baltimore, MD 21230
(301) 659-9314

National Labour Market Board
Sundbybergsvagen 9
S-171 99 Solna
Sweden

In connection with the International Year for Disabled Persons, the National Labour Market Board is planning to compile a catalog of solutions to various vocational problems. For further information write to the above address.

National Multiple Sclerosis Society
205 E. 42nd Street
New York, NY 10017
(212) 986-3240

The National Rehabilitation Information Center (NARIC)
4407 Eighth Street, N.E.
The Catholic University of America
Washington, D.C. 20017
main office (202) 635-5826
Information Specialist (202) 635-5822
TTY (202) 635-5884

> NARIC is funded by Rehabilitation Services Administration (RSA) to improve information delivery to the rehabilitation community by: 1) supplying copies of research reports and audio-visual materials prepared with RSA funding, as well as journal articles, conference proceedings, and other types of publications; 2) preparing bibliographies tailored to specific requests; 3) helping you locate the answers to factual questions such as dates, places, names, addresses, or statistics. Pathfinder is published by NARIC six times a year, (see: Publications.)

National Society to Prevent Blindness
79 Madison Avenue
New York, NY 10016
(212) 684-3505

National Spina Bifida Association
of America
343 S. Dearborn
Chicago, IL 60604
(312) 663-1562

National Spinal Cord Injury Foundation
369 Elliot Street
Newton Upper Falls, MA 02164
(617) 964-0521

Office of Special Education and
Rehabilitative Services
Department of Education
400 Maryland Avenue, SW
Washington, DC 20202
(202) 472-3740

> The function of this office is to develop and implement educational policy to fulfill the mandates of Part B, Education of the Handicapped Act (P.L. 91-230) as amended by P.L. 43-380 and P.L. 94-142, Education of All Handicapped Children Act of 1975.

Office of Technology Transfer (OTT)
Veterans Administration
252 Seventh Avenue
New York, NY 10001
(212) 620-6659

OTT operates under the Rehabilitation Engineering Research and Development Service to transfer research results into clinical practice. This is accomplished by information dissemination on new devices and techniques developed in the rehabilitation engineering program through their publications. OTT maintains a reference collection on rehabilitative engineering available to anyone for use, but primarily helpful to those in medical, allied health and engineering fields. (Also see: Publications.)

REHABILITATION ENGINEERING CENTERS

These centers offer various forms of engineering services. (Alphabetized by State.)

Rancho Los Amigos Hospital
7601 East Imperial Highway
Downey, CA 90242
(213) 922-7167

Rehabilitation Engineering Center
Children's Hospital at Stanford
520 Willow Road
Palo Alto, CA 94034
(415) 327-4800

Rehabilitation Engineering Center
Smith-Kettlewell Institute of
Visual Sciences
2232 Western Street
San Francisco, CA 94115
(415) 563-2323

In addition to rehabilitation engineering research, the Center produces publications. (See; Publications.)

The George Washington University
Medical Rehabilitation R & T Center
2300 Eye Street, NW
Ross Hall, Room 714
Washington, DC 20037
(202) 676-3801

Rehabilitation Engineering Center
Northwestern University
345 E. Superior Street
Room 1441
Chicago, IL 60611
(312) 649-8649

Rehabilitation Engineering Center
University of Iowa
Orthopedics Department
Dill Children's Hospital
Iowa City, IA 52242
(319) 356-1616

Cerebral Palsy Research Foundation
of Kansas, Inc.
4320 E. Kellog Street
Wichita, KS 67218
(316) 683-5627

The Foundation produces a publication describing it's research, Tech Briefs. (See: Publications.)

Rehabilitation Engineering Center
Children's Hospital Medical Center
300 Longwood Avenue
Boston, MA 02115
(617) 734-6000

Tufts University
Medical Rehabilitation R & T Center
171 Harrison Avenue
Boston, MA 02111
(617) 956-5625

Rehabilitation Engineering Center
University of Michigan
225 West Engineering
Ann Arbor, MI 48109
(313) 764-1817

University of Minnesota
Medical Rehabilitation R & T Center
860 Mayo Building
Minneapolis, MN 55455
(612) 373-8990

National Institute for Rehabilitation Engineering
97 Decker Road
Butler, NJ 07405
(201) 838-2500

New York University
Medical Rehabilitation R & T Center
400 E. 34th Street
New York, NY 10016
(212) 679-3200

In addition to rehabilitation research, the Center produces publications. (See: Publications.)

Rehabilitation Engineering Center
Case Western Reserve University
2219 Adelbert Road
Cleveland, OH 44106
(216) 368-2000

Rehabilitation Engineering Center
Krusen Research Center
Moss Rehabilitation Hospital
12th Street & Tabor Road
Philadelphia, PA 19141
(215) 329-5715

The University of Tennessee
Department of Orthopedic Surgery
1248 La Paloma Street
Memphis, TN 38114
(901) 525-2531

Texas Institute for Rehabilitation
and Research
1333 Mousund Avenue
Houston, TX 77025
(713) 979-1440

Applied Rehabilitation Center
Southwest Research Institute
2203 Babcock Road
San Antonio, TX 78229
(512) 699-0386

Rehabilitation Engineering Center
University of Virginia
P.O. Box 3368
University Station
Charlottesville, VA 22903
(804) 924-0311

University of Washington
Medical Rehabilitation R & T Center
cc 814 RJ 30
Seattle, WA 98195
(206) 543-3600

Rehabilitation Engineering Center
Under Secretary of State for Rehabilitation
Ministry of Social Affairs
Mugamaa Building, Tahrir Square
Cairo, Egypt

Rehabilitation Engineering Center
Institute of Orthopedic Surgery and Rehabilitation
Academy of Medicine
Dzierzynskiego 135, 61 545 Poznan
Poland

Rehabilitation Engineer Center
University of Ljubljana
Department of Electrical Engineering
61001 Ljubljana, Trzaska 25
Yugoslavia

Rehabilitation Engineering Society
of North America
1701 S. First Avenue
Suite 504
Maywood, IL 60153

The Society is made up of consumers, therapists, counselors, manufacturers, providers and engineers who develop and provide technology to disabled people.

Rehabilitation International
Information Service
Stiftung Rehabilitation
P.O. Box 101 409
D-6900
Heidelberg 1, Federal Republic of Germany

Stiftung Rehabilitation maintains a computerized system of available modified products.

San Francisco Lighthouse for the Blind
1155 Mission Street
San Francisco, CA 94103
(415) 431-1481

Schwab Rehabilitation Hospital
Departments of Vocational Services and
Occupational Therapy
Technical Aids Evaluation, Training and
Demonstration Laboratory for the Physically
Disabled
1401 S. California Boulevard
Chicago, IL 60608
(312) 522-2010

The Technical Aids Laboratory is designed to give disabled individuals and social service specialists easy access to and information about technical aids for people who are handicapped. Evaluation of equipment and training in the use of aids are among the services offered.

Science for the Handicapped Association (SFHA)
SSS 201
University of Wisconsin-Eau Claire
Eau Claire, WI 54701
(715) 836-4164

Association members include science educators of students who are emotionally, mentally, physically or socially handicapped. The association was formed to promote science for all handicapped students in the schools. This is done through information dissemination at national conferences, publications and a bibliography on science for handicapped students. SFHA recently became an Associated Group of the National Science Teachers Association.

Swedish Engineering Employment Association
Box 5510
S-114 85 Stockholm
Sweden
468 631750
Telex 170 45

This association has formed a computer-based central information system called "Miljobanken" which contains solutions to various work environment problems. Members of the Swedish Engineering Employers' Association can join the "Miljobanken" system free of charge, nonmember firms and institutions can join for a fee.

Telephone Pioneers of America
30-C 1847
195 Broadway
New York, NY 10017

The Telephone Pioneers of America is the world's largest voluntary association of industrial employees. It is composed of men and women in the United States and Canada who have served 18 or more years in the Bell System Companies, certain Canadian Telephone Industry Companies and Rochester Telephone Corporation. Working through 94 chapters in 48 states and Canada, Pioneers devote their free time to a wide range of community service activities. Pioneers' basements become workshops for the repair of recording machines for the blind and the manufacture and design of "talking toys" for autistic children. Special preschool programs have tested thousands of children for vision and hearing problems; older Americans have been screened for glaucoma and hypertension. To contact the Pioneer chapter in your area, consult the local city telephone directory.

TRACE Research and Development Center
for the Severely Communicatively Handicapped
314 Waisman Center
1500 Highland Avenue
Madison, WI 53706
(608) 262-6966

The TRACE Center works in cooperation with the Communication Aids and Systems Clinic of the University of Wisconsin-Madison, to study and develop techniques and aids which augment existing vocal skills of the clinic patient. Information on communication aids and techniques is collected, documented and disseminated by the Center through publications and a computer data base. (Also see: Publications.)

United Cerebral Palsy Assoc., Inc.
66 E. 34th Street
New York, NY 10016
(212) 481-6300

People to People Committee for the Handicapped
Directory of Organizations Interested in the Handicapped
1522 K Street, N.W. Room 1130
Washington, D.C. 20005
(202) 638-2487

This directory lists the names, addresses, phone numbers and officers of 118 organizations of or for handicapped persons. Each listing also describes the structure and purpose of the organization, its principal programs, major publications, newsletters and journals.

Appendix D

Post Secondary Education

At universities, colleges and vocational schools across the United States, changes are being made to meet the needs of students who are handicapped. In this appendix the changes at some institutions are described. All institutions could not be included in the appendix. Information on a school's program may be listed under several titles. Often a good place to start is with the office of the Dean of Students.

The Hadley School for the Blind
700 Elm Street
P.O. Box 299
Winnetka, IL 60093
(312) 446-8111

The Hadley School for the Blind, often called the "University of Courage," is the world's only correspondence school for blind students. Over 4500 students in every state in the U.S. and 55 foreign countries are currently enrolled, and over 125 brailled and or recorded correspondence courses are offered, tuition free. These college level courses are made available through cooperation with the Universities of Indiana, Wisconsin, California and Loyola. The Hadley School is supported entirely by gifts, grants and bequests from foundations, corporations, service groups and individuals.

HLMDC
Audio-Visual Center
Indiana University
Bloomington, IN 47405
(812) 337-1511

The Handicapped Learner Materials Distribution Center (HLMDC) is a part of the Special Materials Project established by Indiana University. HLMDC loans free of charge, (except for return postage), selected media materials such as films, videotapes, kits, games and adaptive devices pertaining to the general special education population. Materials are divided into three collections represented by three separate catalogs: 1) teacher training materials in the area of special education and media production consisting mostly of 16 mm films; 2) handicapped learner collection consisting mostly of classroom curricular materials primarily for examination and evaluation; 3) videotapes that are duplicated into other formats at cost. These services are available to anyone in the U.S.A. involved with educating a handicapped learner.

Handicapped Student Services
University of California, Riverside
11321 Library South
Riverside, CA 92521
(714) 787-4538

The University of California, Riverside provides extensive services to students with disabilities. The relatively flat terrain makes on-campus travel easy for the mobility impaired student. A tactile map is also available to assist visually impaired students in learning the campus layout. UCR is 95% accessible and existing barriers are continually being identified and corrected. The Handicapped Student Services Office offers preadmission counseling to potential students with disabilities to help determine academic qualifications and to discuss financial, personal and mobility resources needed for independence.

Physically Limited Program
De Anza College
21250 Stevens Creek Blvd.
Cupertino, CA 95014
(408) 996-4753

The Physically Limited Program of De Anza College, begun in 1972, now operates year round and enrolled more than 500 students in the academic year 1978-79. It provides many of the support services that enable people to participate in the wide range of educational and self enrichment programs on campus. The level of involvement with the Physically Limited Program is dependent on the individual's need and desire.

Southern Illinois University
Specialized Student Services Office
Carbondale, IL 62901
(618) 453-5738

Southern Illinois University has tried to fully integrate disabled students into the University community by 1) removing physical barriers and 2) helping students adapt their abilities to the on-going University community. Students with varying disabling situations including those who are wheelchair-bound, semiambulatory, visually impaired, hearing impaired or learning disabled are enrolled at SIU. It is stressed that the handicapped student not be separated from the University as a whole.

Appendix E

Publications

The following is a listing of periodicals and publications which may provide further information to the reader. For a listing of titles used in the catalog text see Bibliography.

PERIODICALS

Accent on Living. Bloomington, Illinois: Accent on Information, Inc.

This is a quarterly magazine of services and information on daily living and equipment for persons with disabilities. For further information, write: Accent, P.O. Box 700, Bloomington, IL 61701. (Also see: Organizations.)

American Rehabilitation. Washington, DC: Rehabilitation Services Administration.

This is the official bimonthly publication of the RSA. For further information, write: Superintendent of Documents, P.O. Box 1533, Washington, DC 20402.

Area Development Sites & Facility Planning. New York, New York: Halcyon Business Publications, Inc.

The January, 1978 edition of this magazine contains two feature articles concerning handicapped people. Terrance Moakley wrote the first article, entitled "It's Easy and Inexpensive to Install Facilities for the Handicapped." The second article, "What Companies Are Doing About Hiring Handicapped" was prepared by the magazine staff. For further information, write the above publisher at 432 Park Avenue South, New York, New York 10016.

Bulletin of Prosthetics Research. New York, New York: Veterans Administration.

This is a biannual report on research and development in rehabilitative engineering. For further information, write: Office of Technology Transfer, Veterans Administration, 252 Seventh Avenue, New York, NY 10001. (Also see: Organizations.)

Bulletins on Science and Technology for the Handicapped. Washington, DC: American Association for the Advancement of Science.

This is a quarterly publication. For further information, write: Project on the Handicapped in Science, AAAS, 1776 Massachusetts Avenue, NW, Washington, DC 20036. (Also see: Classroom Materials; Organizations.)

Canadian Rehabilitation Council for the Disabled. *Let's get technical.* Toronto, Ontario, Canada: Canadian Rehabilitation Council for the Disabled, 1-8, 1978.

This book is a compilation of *Let's Get Technical Bulletins* reprinted from *Rehabilitation Digest*, the journal of the Canadian Rehabilitation Council for the Disabled.

Capitol Publications, Inc., Suite G-12, 2430 Pennsylvania Avenue, NW, Washington, DC 20037.

An independent national news service which publishes fourteen different specialized newsletters for the education community. These publications provide current news regarding federal legislation, policies, trends, research, funding and practices concerning the education of handicapped students. Capitol Publications also offers workshops, seminars and books.

Cerebral Palsy Research Foundation. *Problem solving with rehabilitation engineering: Tech brief.* Wichita, Kansas: Cerebral Palsy Research Foundation of Kansas, Rehabilitation Engineering Center.

Published quarterly, *Tech Briefs* contain articles describing solutions to vocational problems found by the Rehabilitation Engineering Center. Potential products and concepts are discussed in the publications. Past issues have articles on a work station for a quadraplegic cerebral palsy typist; a reach instrument; a scanning calculator; a floor sweeping collector and a one-handed punch press. For further information, write: Cerebral Palsy Research Foundation of Kansas, Inc., 4320 E. Kellog Street, Wichita, KS 67218. (Also see: Organizations.)

Communication Outlook. East Lansing, Michigan: Michigan State University.

This is a quarterly newsletter on the application of technology to the needs of persons who experience communication handicaps due to neurological or neuromuscular conditions. For further information, write: Artificial Language Laboratory, Computer Science Department, Michigan State University, East Lansing, MI 48824.

Dialogue with the Blind. *Dialogue Magazine.* Berwyn, Illinois: Dialogue Publications.

Published quarterly, this magazine is available in recorded, large print and braille editions. It is available from Dialogue with the Blind, regional libraries and the Library of Congress. For further information, write: Dialogue with the Blind, 3100 S. Oak Park Avenue, Berwyn, IL 60402. (Also see: Additional Available Resources.)

Helen Keller National Center for Deaf-Blind Youths and Adults. Nat-Cent News. Sands Point, New York.

This magazine, printed in large type for visually impaired readers, is published quarterly. It includes news and feature articles of interest to deaf and blind people. For further information, write: The Helen Keller National Center, 111 Middle Neck Road, Sands Point, New York 11050. (Also see: Organizations.)

Informer. Hot Springs, Arkansas: Arkansas Rehabilitation Research and Training Center.

This is a quarterly publication which disseminates and promotes the utilization of new research, training, knowledge and technology resulting from the Special Centers Program of the National Institute of Handicapped Research. For further information, write: Arkansas Rehabilitation Research and Training Center, P.O. Box 1358, Hot Springs, AR 71901.

International Commission on Technical Aids, Housing and Transportation. ICTA multi-lingual manual on technical aids and index. Bromma, Sweden: ICTA, 1964-1973.

Journal of Rehabilitation. Washington, DC: National Rehabilitation Association.

This is the quarterly publication of the NRA, a private nonprofit corporation dedicated to the rehabilitation and well being of handicapped persons. For further information, write: NRA, 1522 K Street, NW, Washington, DC 20005.

Library of Congress. Reference circular. Washington, DC: National Library Service for the Blind and Physically Handicapped, Reference Section.

Some of the circulars produced by the library are: Reading, Writing, and Other Communication Aids for Visually and Physically Handicapped Persons; Braille Instruction and Writing Equipment; National Organizations Concerned with Visually and Physically Handicapped Persons. These circulars are available free from the National Library Service for the Blind and Physically Handicapped, Library of Congress, Washington, DC: 20542. (Also see: Organizations.)

National Association for Visually Handicapped. In Focus New York, New York: NAVH.

Ibid. Seeing Clearly. New York, New York: NAVH.

These newsletters are printed in large type. In Focus is for children, Seeing Clearly for adults. NAVH prepares and distributes large print books. For other services they provide see Appendix C, Organizations. For further information on publications write: National Association for Visually Handicapped, 305 E. 24th Street, New York, NY 10010.

National Institute of Handicapped Research, REHAB BRIEF. Gainesville, Florida: University of Florida, Rehabilitation Research Institute.

REHAB BRIEF, (Bringing Research into Effective Focus), is prepared by the University of Florida for NIHR. Each issue is devoted to different vocationally related topics such as vocational evaluation or a particular disability. These publications are distributed by the University of Florida, Rehabilitation Research Institute, Gainesville, FL 32610. Braille and taped editions are available from regional service libraries.

NARIC. Pathfinder. Washington, DC: National Rehabilitation Information Center.

Published six times a year providing information on resources and technology in rehabilitation. It is available in both print and braille. For further information, write: NARIC, 4407 Eighth Street, Catholic University of America, Washington, DC 20017. (Also see: Organizations.)

Paraplegia News. Washington, DC: Paralyzed Veterans of America.

This is a monthly publication of news concerning civilians and veterans who are paraplegic and wheelchair bound. For further information, write: Paraplegia News, 5201 N. 19th Avenue, Suite 108, Phoenix, AZ 85015.

Rehabilitation Gazette. St. Louis, Missouri: Rehabilitation Gazette.

This is an annual international journal of independent living for the disabled. For further information, write: Rehabilitation Gazette, 4502 Maryland Avenue, St. Louis, MO 63108.

Rehabilitation Literature. Chicago, Illinois: National Easter Seal Society for Crippled Children and Adults.

This is the monthly interdisciplinary journal of the National Easter Seal Society. For further information, write: Rehabilitation Literature, 2023 W. Ogden Avenue, Chicago, IL 60612.

Rehabilitation World, The US Journal of International News and Information. New York, New York: Rehabilitation International U.S.A.

This is the quarterly publication of Rehabilitation International U.S.A. For further information, write: Rehabilitation World, 20 W. 40th Street, New York, NY 10018.

SAVI Update. Berkeley, CA: Science Activities for the Visually Impaired, University of California.

A newsletter on curriculum materials and education programs for the visually impaired student in science classes. Available from SAVI, Lawrence Hall of Science, University of California, Berkeley, CA 94720.

PUBLICATIONS

Accent on Living Buyer's Guide. Bloomington, Illinois: Cheever Publishing, Inc.

This is a list of devices and sources of special products and their manufacturers. For more information, write Accent, P.O. Box 700, Bloomington, IL 61701. (Also see: Organizations.)

American Association for the Advancement of Science. A research agenda on science and technology for the handicapped. Washington, DC: AAAS, 1979.

This is a report of a project which identified priority research needs in the area of science and technology for the disabled. For further information, write: Office of Opportunities in Science, AAAS, 1776 Massachusetts Avenue, NW, Washington, DC 20036. (Also see: Classroom Materials; Organizations.)

Anderson, E. Art for all the children: A creative sourcebook for the impaired child. Springfield, Illinois: Charles C. Thomas, 1978.

Adaptations for various art activities such as weaving and photography are presented with directions for making the adaptations. In the book are sections on art and learning disabilities, behavior disorders, hearing impairments, visual impairments, mental retardation and physical disabilities.

Antenucci, B. & Corthell, D. Rehabilitation engineering: A counselor's guide. Menomonie, Wisconsin: Research and Training Center, Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout.

This document is a report from a study group of the Sixth Institute on Rehabilitation Issues, June 5th to 8th, 1979. The group was to develop resource material on engineering as it relates to the rehabilitation process and the vocational options of handicapped people. Applications of engineering technology, legal issues and assessing a person's needs are some of the topics the publication addresses.

Athelstan, G., Bower, A. & Crewe, N. Employment after spinal cord injury. Minneapolis, Minnesota: University of Minnesota, 1978.

This book offers many new ideas about the employment options available to quadriplegics and paraplegics. Personal experiences were collected from more than 100 spinal cord injured men and women. They describe how they found their jobs, the kinds of problems they faced, and the solutions they found. They discuss their duties and the satisfactions and frustrations of working.

Bell, T.E. Technologies for the handicapped and the aged. Washington, DC: National Aeronautics and Space Administration, Technology Transfer Division, July, 1979.

This booklet contains brief descriptions of NASA technology which has been incorporated into projects for people who are handicapped or elderly. It is written in nontechnical language.

Botterbusch, K.F. A guide to job site evaluation. Menomonie, Wisconsin: Materials Development Center, Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout.

This book explains how to use different types of job site evaluations, how to set up a job site and evaluate the client. Included are sample evaluation forms.

Bruwelheide, K.L. Assisting the physically handicapped: An identification and development of apparatus for laboratory shop phase I. Bozeman, Montana: Montana State University, Department of Agricultural and Industrial Education, 1979. Through the Montana Office of Public Instruction.

This is a report of a research project which was conducted to design, develop and test apparatus that will permit physically handicapped individuals to properly, safely and independently use shop tools and equipment commonly identified in industrial arts and vocational agriculture curriculum guides. A set of working drawings of the apparatus is included. This publication also contains a model for teacher assessment of physically handicapped students to determine their capabilities and limitations.

Carner, M.N., Otten, P., & Reich, N. Clothing for handicapped people, an annotated bibliography and resource list. Tucson, Arizona: University of Arizona, 1979.

This bibliography provides information related to clothing for handicapped people. In addition, it identifies product sources. The bibliography has been compiled for handicapped people, organizations that assist them, professionals, paraprofessionals and students interested in this topic. It is the authors' intention to review and update the publication every three years to permit additions and deletions when necessary.

Coons, M. & Milner, M. (Eds.). Creating an accessible campus. Washington, DC: Association of Physical Plant Administrators of Universities and Colleges, 1978.

Of particular interest to readers are the chapters discussing developing an accessible science laboratory, descriptions of instructional aids and funding sources.

Copeland, K. (Ed.). Aids for the severely handicapped. Richmond, England: Sector Publishing Ltd., 1974.

Do it yourself again. New York: American Heart Association, 1969.

This booklet describes self-help devices for people recovering from a stroke. A wide variety of aids are pictured and described. These aids are designed to help stroke patients achieve self care skills and independence. Available through your local heart association.

Gault, et. al. Manual of methods for construction of inexpensive rehabilitation equipment for use in "Activities of Daily Living" in hospitals and homes. Ryukyu, Hawaii: University of Hawaii Postgraduate Medical Education Program, 1971.

Geist, C.S. & McMahon, B.T. Region V short term training conference on job modification, job restructuring and job engineering for severely disabled persons. Chicago, Illinois: Illinois Institute of Technology Proceedings, April 16-17, 1979.

This manual fully describes the conference on job modification, job restructuring and job engineering for severely disabled persons. The publication includes the workshop agenda, an annotated list of the films shown at the conference and copies of the speeches delivered at the conference. The manual also contains conference evaluations and resource materials.

Green Pages Rehab SourceBook. Winter Park, Florida: SourceBook Publications, Inc., 1979.

A directory of products and services for the disabled grouped by service categories and states.

Haggerty, J. Spinoff 1979. Washington, D.C.: National Aeronautics and Space Administration, Technology Transfer Division, February, 1979.

In this publication, written for the general public, are descriptions of products used in everyday life which are derived from NASA technology; there is a list of NASA Field Centers, Applications Centers and Application Teams.

High, E.C. A resource guide to habilitative techniques and aids for cerebral palsied persons of all ages. Washington, DC: The George Washington University, Job Development Laboratory, 1979.

This book describes numerous aids, equipment, treatment programs and treatment techniques. In addition, each section of the book provides a preliminary text and an extensive reference list to help the reader select appropriate resources. Subject areas include treatment techniques, and advice to parents in positioning and seating, feeding, dressing, hygiene and household and community involvement.

Hohenshil, T.H. & Maddy-Bernstein, C. Resource guide: Vocational counseling for the handicapped. Blacksburg, Virginia: Virginia Tech University, College of Education, 1980.

This guide is designed to assist educational personnel to expand and increase the effectiveness of their vocational guidance and counseling programs for the handicapped. The guide includes information about books, articles, research reports, A-V materials, staff training materials, organizations and directory lists. Topics include counseling, education, job placement, career education, legislation, counseling families of the handicapped, organizations, and multi-media materials.

Information Exchange Program. Publications and audiovisual aids directory of the rehabilitation research and training centers. Hot Springs, Arkansas: Arkansas Rehabilitation Research and Training Center, 1978.

This directory combines two documents that have previously been published separately. Part I contains a bibliography of 2,054 publications resulting from research supported by the Rehabilitation Research & Training Centers. Part II is devoted to a current listing of audio-visuals developed or used by R&T Centers in their training programs.

Institute for Information Studies. Rehabilitation engineering source books. Falls Church, Virginia: Institution for Information Studies, 1979.

This document is designed to serve as a source book, or reference work, for day-to-day use by rehabilitation practitioners whose clients find themselves barred from certain activities by functional limitations resulting from a disability. Here, the user may learn whether a similar problem has elsewhere been found to have a technological solution. It is a practical aid which chronicles actual rehabilitation problems which have been successfully resolved through the use of technology, especially applications from the field of rehabilitation engineering.

International Labour Office. Documentation vocational rehabilitation. Geneva, Switzerland: International Labour Office, 1975.

This publication, written in English, French and Spanish presents a list of I.L.O. (International Labour Office) documents. The list includes documentation of technical experience, legislation and research in the field of social integration and vocational rehabilitation of the handicapped. This list can be a useful aid for increasing the effectiveness of services to handicapped persons.

International Nickel Company. Design for the disabled. New York, New York: International Nickel Company, 1979.

This booklet presents colored photographs and descriptions of furniture, plumbingware (faucets) and hardware products that have been designed for the disabled. The basic physical actions of reach, grasp, force and movement are associated with the products for visual appeal and durability.

Jamison, S.L. (Ed.). Computing careers for deaf people. New York, New York: Association for Computing Machinery, Inc., 1976.

This manual contains the verbatim proceedings of the National Conference on Computing Careers for Deaf People. Topics addressed at the conference included: perspective on deaf people, perspective on computing careers, educational opportunities in computing special programs, placement problems and solutions, on the job problems and solutions and success factors in employment.

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Johnson, M.D., Quarve, J., & Stanton, J. Product inventory of hardware, equipment and appliances. Minneapolis, Minnesota: National Handicapped Housing Institute, 1978.

Products used in the home are evaluated for their potential ease of operation by people with all types of handicaps. In the catalog a list of appropriate considerations exists for each type of product. Different manufacturer's products were then evaluated (yes, no) using the list of considerations, (e.g. is there large easy to read signage on a kitchen range). Each evaluation page has on it manufacturer's address, and phone number, price, model number, photo and comments. Available from National Handicapped Housing Institute, Minneapolis, Minnesota.

Kernaleguen, A. Clothing designs for the handicapped. Canada: University of Alberta Press, 1978.

Brief instructions for adapting various pieces of clothing are given in this book.

King, M.F. Barrier free design equipment and aids catalogue. West Bloomfield, Michigan: Michigan Center for a Barrier Free Environment, 1979.

This publication describes over 100 products to aid handicapped people. The descriptions include pictures and product source information. In addition, this manual contains a list of manufacturers and suppliers and a list of other sources.

Klinger, J.L. Mealtime manual for people with disabilities and the aging. Camden, New Jersey: Campbell Soup Company, 1978.

This book describes numerous shortcut techniques and suggestions for performing basic kitchen tasks. All are kitchen tested and adapted for disabled and elderly cooks. In addition, the book contains recipes, menus and information about good nutrition. A list of helpful references, agencies and product sources is included at the end of the book.

LaRocca, J. & Turen, J.S. The application of technological developments to physically disabled people. Washington, D.C.: The Urban Institute, 1978.

This paper attempts to assess the impact of technological advances and rehabilitation technologies on disabled people. The degree to which these technologies have helped disabled people overcome the effects of their disabilities is also assessed. The focus of this paper is on blind, deaf and wheelchair bound individuals. Included in this paper is a discussion of the effect of public policy, and the research, manufacturing, marketing, training and funding problems associated with the development and application of advanced technology. Future potential as well as the current limitations of employment, housing and transportation are considered.

Lowman, E. & Klinger, J.L. Aids to independent living: Self-help for the handicapped. New York: McGraw-Hill Book Company.

This book contains a comprehensive compilation of devices in the categories of tasks of daily living, ambulation, housing, furniture, homemaking, communications, vocations, recreation, transportation and travel, education, and speech. Each chapter has a bibliography pertaining to that activity category. At the end of the book is a listing of equipment sources.

Mallik, K. & Yuspeh, S. Job development and enhanced productivity for severely disabled persons. Final Report R.S.A. Grant No. 16-P-56803/3. July 1979. Washington, DC: Job Development Laboratory, 1979.

The purpose of this project was to develop a model for placing severely disabled persons in competitive employment. The goal was to increase employment and placement of severely disabled persons by increasing their capacity to perform a wider range of the physical tasks ordinarily associated with information handling jobs.

McCullough, H.E. & Farnham, M.B. Kitchens for women in wheelchairs. Urbana, Illinois: University of Illinois, 1961.

This publication contains pictures, descriptions and blueprint drawings of kitchen arrangements adapted for persons in wheelchairs. Included are specially designed work and storage units and suitable commercial appliances. This manual can be obtained from Small Homes Council-Building Research Council, One East Saint Mary's Road, Champaign, Illinois 61820.

Meers, G.D. (Ed.) Handbook of special vocational needs education. Gaithersburg, Maryland: Aspen Systems Corp., 1980.

This is a book of readings about special vocational needs education. Topics covered include the identification and characteristics of disadvantaged students, identification and characteristics of handicapped students, curriculum modification and instructional practices, work experience and cooperative placement programs, teacher strategies for counseling special needs students, parents' roles, administrative and supervisory functions, and program evaluation.

Mueller, J. Designing for functional limitations. Washington, DC: The George Washington University Rehabilitation Research and Training Center, Job Development Laboratory, 1979.

Mueller has designed office and industrial worksites that provide functional environments for the handicapped worker. This manual presents illustrations of the worksites, along with suggested modifications to make the worksite usable. This resource does not deal with architectural accessibility per se. The focus is usability, to enable the disabled worker to function independently. (Also see: Modifications to the Work Environment.)

Office for Handicapped Individuals. Resource guide: Rehabilitation engineering and product information. Washington, D.C.: Author, 1980.

Resources included in the guide provide information on sensory, mobility, and communication technology which assist handicapped individuals in daily living, educational, recreational, vocational, and transportation activities. Contents include: 1) federal and private sources of information; 2) general information sources; 3) financial assistance and loans for aids and equipment; 4) funding guide; 5) publications; 6) future information sources on engineering products.

Phelps, L.A. & Batchelor, L.T. Individualized education programs (IEPs): A handbook for vocational education. Columbus, Ohio: National Center for Research in Vocational Education, 1979.

This 38 page monograph (Information Series No. 188) describes the following aspects of IEP development and implementation: description of the IEP, cooperative planning, levels of IEP development, and an IEP process model. The model covers referral of students, informal data collection, sharing of assessment information, making placement decisions, developing and writing the IEP, implementing and monitoring the IEP, and evaluating the IEP. A sample IEP is also included.

Rehabilitation Engineering Center. Controls: Reference catalog to aid physically limited people in the operation of assistive devices. Palo Alto, California: Children's Hospital at Stanford, Rehabilitation Engineering Center, 1980.

Robinault, I.P. (Ed.). Functional aids for the multiply handicapped. New York: Harper and Row, 1973.

Information in this resource manual will aid people with multiple disabilities to function more independently. The book answers questions of what to use, where to buy it, or how to construct it.

The content is grouped into four parts: transfer, travel, and mobility; personal care; communications and learning; and recreation.

Saunders, F.A. Rehabilitation engineering aids and devices for persons with impaired hearing. San Francisco, California: Smith-Kettlewell Institute.

This catalog lists devices for the hearing impaired along with descriptions and addresses for further information. This publication contains both currently available devices and those under development. Readers can join the mailing list and receive current updates of the catalog. (Also see: Organizations.)

Shaw, A.M. & Stevens, C (Eds.). Drama, theatre, and the handicapped. Washington, DC: American Theatre Association, 1979.

A collection of essays intended to reinforce awareness and increase knowledge of issues, needs and problems related to fostering the full participation of individuals who are handicapped into drama and theatre activities. The first section looks at ways drama and theatre relate to handicapped individuals as an art form, an educational process, a therapy, a career. In the second section ways of eliminating barriers to full involvement are presented, including suggestions for on stage, behind the stage and in front of the stage accessibility. Drama programs by, for and with handicapped people are described in section three. An annotated bibliography is found in section four.

Skurnick, L.S. & Seigel, D.H. A partially annotated bibliography of job related physical capacities. Miami, Florida: Center for Labor Research and Studies, 1979.

This bibliography includes materials related to the following topics: job analysis, tests and testing, matching job demands and physical abilities, work evaluation and guidance, and bibliographies and legal references. (Also see: Organizations.)

Special education materials made available through the BEH marketing program. Westerville, OH: LINC, 1980.

An annotated collection of products, distributors and publications compiled by LINC Services, Inc. LINC is a corporation organized to link new resources produced through research and development with dissemination resources.

Steps Toward Campus Accessibility. Washington, DC: Association of Physical Plant Administrators of Universities and Colleges, March, 1979.

Programs which have been successful im making various college campuses accessible to students who are handicapped are described in this publication.

Strebel, M. Adaptations and techniques for the disabled homemaker (fifth edition). Minneapolis, Minnesota: Sister Kenny Institute, 1978.

Many suggestions for modifications of the work space are given as well as descriptions of available products useful to a person who is disabled. Some of the homemaking areas covered are storage space, selecting appliances, food preparation and sewing. There is also a list of additional reading.

Vanderheiden, G. & Grilley, K. Non-vocal communication techniques and aids for the severely physically handicapped. Madison, Wisconsin: Trace Research and Development Center, 1975.

This publication is based upon transcriptions from the 1975 Trace Center National Workshop series. Development of communication in the non-vocal physically handicapped child (or adult) was the topic presented at the workshop. The subject matter includes definitions of the problem and descriptions of the tools that can be employed to develop an effective supplementary channel of communication for a non-verbal physically handicapped child. Programs demonstrating the application of some of the tools are also described. (Also see: Organizations.)

Vanderheiden, G.D. Non-vocal communication resource book. Madison, Wisconsin: Trace Research and Development Center.

Illustrations and descriptions of communication aids for non-vocal individuals are presented in this book. Included in this publication are descriptions of custom communication boards, charts and lap trays. (Also see: Organizations.)

Vieceli, L. (Ed.). Guidelines for the selection, training, and placement of blind persons in information service expediting. Carbondale, Illinois: Southern Illinois University, 1975.

Information Service Expediting (I.S.E.) is an occupational area which provides an ever-increasing number of job openings for blind persons. Jobs in this field utilize the telephone and other telecommunications equipment to provide agencies and businesses with explanations and information referrals. This manual presents guidelines for the selection, training, placement, and job restructuring for blind persons in I.S.E.

Appendix F

Classroom Material

The reader will find in this appendix some materials which may be helpful in teaching students who have special needs. This appendix contains a sampling of available material, not an exhaustive listing.

Adams, Gary H. (compiled by). Science for the physically handicapped in higher education: A guide to sources of information. Washington, DC: National Oceanic and Atmospheric Administration, Environmental Data and Information Service.

This guide provides brief descriptions of organizations who can provide information, assistance, and modifications in the science fields for students who are physically handicapped.

American Association for the
Advancement of Science
Office of Opportunities in Science
1776 Massachusetts Avenue, N.W.
Washington, DC 20036
(202) 467-4400

Redden, M.R., Davis, C.A., & Brown, J.W. Science for handicapped students in higher education: Barriers, solutions and recommendations. Washington, DC: American Association for the Advancement of Science, 1979.

Handicapped persons who wish to enter careers in science encounter numerous barriers. The authors of this report gathered data from several sources in order to identify barriers to postsecondary science education and to look at methods for overcoming them. (Also see: Organizations, Publications.)

Resource directory of handicapped scientists. Washington, DC: American Association for the Advancement of Science.

This directory contains a listing of scientists who are handicapped and are willing to consult on a variety of science related subjects. Information on each individual listed includes their names, scientific discipline, most recent position, nature of handicap, and expertise and consulting interests. (Also see: Organizations; Publications.)

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American Foundation for the Blind
15 W. 16th Street
New York, NY 10011
(212) 620-2000

Materials can be borrowed at no cost from the N.C. Migel Memorial Library. It contains a collection of literature, films and educational programs. (Also see: Additional Available Resources; Organizations.)

Argus Kommunikation
Verlag fuer Lehr-und
Lernmittel GmbH
Postfach 1948
Ortenberger Str. 7
D-7600 Offenburg
West Germany

In the 1980 catalog, the careers section has various materials useful for career awareness and vocational information at different grade levels.

Calhoun, M.L., and Hawisher, M.F. *Teaching and learning strategies for physically handicapped students*. Baltimore, Maryland: University Park Press, 1979.

This book is for teachers of students with physical disabilities. The text is designed to help school personnel develop thoughtful, well researched guidelines for establishing new programs and improving existing ones. In the book, the practical issues of setting up a classroom program, finding appropriate assessment techniques, developing teaching materials, and working with other professionals are discussed within the framework of the current research on the educational needs of the physically handicapped population.

Capital Area Career Center. *Adapting vocational education for handicappers*. Mason, Michigan: Author, 1980.

This is a series of 37 manuals which identify the physical skills and working conditions required in each of 34 occupations. The manuals also provide a method for comparing a student's physical abilities to the physical requirements of occupations, so he or she can choose a vocational program. In addition, they provide guidelines for making adaptations in the vocational classroom to help the student function in the program he or she chooses.

Chabot College
25555 Hesperian Boulevard
Hayward, CA 94545
(415) 786-6700

Brown, R.N. Development of curriculum for a non-traditional machine tool technology program accessible to the physically handicapped. Hayward, California: Chabot College, South County Community College District, 1979.

This manual describes the program and curriculum for Computerized Numerical Control in the Machine Tool Technology area. This program evolved from two forces. The first force was the increase of computer run machines in industry. The second was legislation mandating that college level programs be accessible to the physically handicapped.

Developmental Learning Materials
7440 Natchez Avenue
Niles, IL 60648
(800) 621-5809

Distributors outside U.S.A.:

PMB Industries, Ltd.
1220 Eleesmere Road
Units 15-17
Scarborough, Ontario
Canada M1P 2X5

DLM Japan, Ltd.
7th Floor Shibyua Building
1 Naito-cho, Shinjuku-ku
Tokyo, Japan

Juan Suarez, Inc.
1762 Ponce de Leon Avenue
Santurce, Puerto Rico 00909

Argus Communications
Plumpton House
Plumpton Road
Hoddesdon, Herts
EN11 OLB
England

Driver Training Program
Rehabilitation Institute
261 Mack Boulevard
Detroit, MI 48201
(313) 494-9813

Persons who are handicapped are evaluated and trained as drivers and assisted in selecting adaptive devices to help them as motorists. Driving instruction, (which is individually programmed), is provided by a driver trainer who is also an occupational therapist. Any physically handicapped person is eligible for an evaluation of his or her driving potential through this program.

experience education
Project Discovery Catalog
Southwest Iowa Learning Resources Center
401 Reed Street
Red Oak, IA 51566
(712) 623-4913

Project Discovery is a hands-on career exploration package. The catalog lists the jobs for which packages are available. Each package consists of a vocabulary book, ("First Look Book"), student instructions and the equipment needed for the exploration activities.

Hadary, D.E. & Cohen, S.H. Laboratory science and art for blind, deaf, and emotionally disturbed children: A mainstreaming approach. Baltimore, MD: University Park Press, 1978.

A series of lessons used in mainstreamed classes.

Heller, J. How to master touch typing step-by-step (with one hand). Wantagh, New York: Special Education Step-by-Step, 1966.

Jack Heller has developed a program to teach handicapped persons to type as effectively as nonhandicapped persons. Individuals who have missing fingers learn to type by using a mouthstick, head pointer, elbow pointer, toe, one hand or even a few fingers on one or both hands. The materials developed by the author include a teacher's guide, keyboard charts and books of typing drills and exercises. The charts which illustrate finger positions on the keyboard can be reproduced without prior written permission. The author has also developed typing programs for legally blind, learning disabled and bilingual students.

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Hubbard
Special Education Materials
P.O. Box 104
Northbrook, IL 60062

Media materials are available on several topics including training regular classroom teachers to work with students who are mainstreamed, the law and education, behavior problems and planning Individualized Educational Programs.

Human Resources Center
Albertson, Long Island, NY 11507
(516) 747-5400

Yuker, H.E., Feldman, M.A., Fracchia, J.F. and Younng, J.H. The modification of educational equipment and curriculum for maximum utilization by physically disabled persons: Educational and school equipment for physically disabled students. Albertson, New York: Human Resources Center, 1967.

This publication provides information pertinent to the education of severely physically disabled children. The monograph discusses school equipment that is nonlimiting in the sense that it presents no barriers and or removes any barriers which might be encountered by a student with a physical disability. In addition, it offers a guide to modifying and selecting equipment for maximum utilization by disabled students.

Ken Cook Educational Systems
12855 W. Silver Spring Drive
P.O. Box 207
Butler, WI 53007
(414) 466-6060

Ken Cook has available audio-visual learning packages for individual work stations. Some of the subjects are: Small Engine Technician, Diesel Generator Technical Course, Marine Engine Technician, Careers in Welding and Communicating for Careers.

Maryland Vocational Curriculum Production Project
Western Maryland Vocational Resource Center
P.O. Box 5448, McMullen Highway
Cresaptown, MD 21502
(301) 777-5886

Mangano, R.M., Foster, P.R., Hafen, S., DeGrey, G., Buxton, R. Vocational curriculum resources for handicapped students: A guide to print and nonprint instructional materials. College Park: University of Maryland, Maryland Vocational Curriculum Research and Development Center, 1979.

This guide consists of an instructional checklist for each resource. The checklist indicates evaluative comments on usability and suitability, information on readability, format, (instructional, non-print, etc.) and intended use. Topics covered include agriculture, auto body repair, auto mechanics, basic math skills, basic reading skills, business education, career education, carpentry, cosmetology, custodial and maintenance, data processing, electricity, electronics, food industries, graphics, health occupations, home economics, needle trades, life skills and consumer education, safety, welding and professional resources.

National Association of the Deaf
814 Thayer Avenue
Silver Spring, MD 20910
(301) 587-1788

Edwards, G.A. (Ed.). Teacher/counselor guide to: Is science a possible career for you? Philadelphia, PA: Research for Better Schools, 1978.

Lesson plans for a science career development program designed for students who are deaf. It addresses the questions "Why consider a science career"?, "What do people in science do"? and "How do you find out if science is a career for you"? A filmstrip is also included in the program materials.

National Science Foundation-H Project
"Adaptation of Science Learning Experiences
for Visually Impaired Students"
St. Mary's Junior College
2500 S. 6th Street
Minneapolis, MN 55454
(612) 332-5521

At St. Mary's, a Project Coordinator works with teachers and students to adapt science classes. An information sheet has been written explaining the process used to adapt general science classes, suggestions for adapting the science laboratory and examples of adaptations for the biology laboratory. Suggestions include techniques in labeling, measuring, diagramming and carrying out an enzyme experiment.

New Jersey Institute of Technology
323 High Street
Newark, NJ 07102
(201) 645-5369 or 645-5371

Cochin, I. & Herman, H. The macrolab: A center for the handicapped at New Jersey Institute of Technology. Final Project Report. Newark, NJ: New Jersey Institute of Technology, 1979.

The goal of this program is to aid handicapped individuals to achieve their career and educational objectives. The report describes the process used to help handicapped participants develop skills, methods and devices to enable them to overcome barriers arising from their handicaps. The report includes descriptions of devices developed. Among these are a spectrometer, electronic breadboard, meter reader, pan balance, and vibration demonstration device for participants with visual, hearing, or physical disability.

New York University
Medical Rehabilitation R&T Center
400 E. 34th Street
New York, NY 10016
(212) 679-3200

Hunt, G., Judson, J., Kristeller, E., Rush, H., and Zimmerman, M. A manual for training the disabled homemaker. Rehabilitation monograph VIII. New York, New York: New York University Medical Center, 1970.

The information contained in this manual will aid instructors and those who set up disabled homemaker training programs. The topics presented in the manual include simplifying work, conserving energy, and performing certain necessary skills. In addition, the manual provides descriptions of disabling conditions. (Also see: Organizations.)

P.R.I.D.E. Foundation
1159 Poquonnock Road
Groton, CT 06340
(800) 962-0707
(203) 447-7433

Kennedy, E.S. A curriculum for advanced level of in-service training for the homemaker home health aid for the State of Connecticut. Groton, Connecticut: P.R.I.D.E.

This guide consists of a variety of one hour lesson plans for 18 different modules including communication, home management and practical nursing. (Also see: Additional Available Resources.)

Recording for the Blind, Inc.
215 East 58th Street
New York, NY 10022
(212) 751-0860

Taped educational books are lent at no cost to visually and physically handicapped students.

Ridley, A.F. Space and equipment for teaching independent living skills to the handicapped. Tallahassee, Florida: Florida Department of Education, 1975.

This manual provides information about teaching independent living skills to the handicapped in both the public secondary schools and special facilities. Included in the manual are numerous photographs and descriptions which show various uses of space and equipment. The publication can be useful in planning new facilities, renovating or remodeling present facilities and in adding small and large equipment.

Sped Publications
2010 Eagle View Drive
Colorado Springs, CO 80907

Taylor, B. Basic introduction to typing. Colorado Springs, Colorado: Sped Publications.

A basic typing course consisting of 12 cassette tapes, (24 lessons), a Teacher's Manual and a head set for the tape recorder. The course covers the complete keyboard, numbers, symbols, centering, simple manuscript typing, letter formats and envelope addressing. This course, compiled for students with a visual impairment, can also be used by students who are slow learners, emotionally disturbed, mentally retarded or have low reading skills. The course is designed for students to progress at their own rate.

Studley, V. Left-handed calligraphy. New York, New York: Van Nostrand Reinhold Company, 1979.

Some of the problems the author's students encountered in calligraphy were solved by forming the letters in the reverse direction of the usual way of forming them.

Tombaugh, D. Biology for the blind. Euclid, Ohio, Euclid Public Schools, 1973.

This manual presents extensive information on how to teach biology to the blind student. The first three chapters discuss class orientation, laboratory assistants and classroom procedures such as tests, homework and laboratory reports. Chapter four contains information about the texts and equipment that are available. Chapter five describes techniques which enable the blind student to participate in class activities.

University of Iowa
Office of Services for Handicapped
Iowa City, IA 52240
(319) 353-6967

Office of Services for Handicapped. Serving handicapped students: A faculty/staff handbook. Iowa City: University of Iowa.

This 20 page booklet contains information designed to help university faculty instruct disabled students more appropriately. Topics covered include attitudinal considerations and techniques to help students with various disabilities; hearing impairments, visual impairments, speech impairments, motor impairments, epilepsy, diabetes mellitus, learning disabilities, and emotional disorders.

University of Wisconsin-Stout
Menomonie, WI 54751

Draemer, D.G. Driver education for the handicapped manual. Menomonie, Wisconsin: University of Wisconsin-Stout, 1976.

This manual was prepared as a curriculum and aid for driver educators and handicapped students at the University of Wisconsin-Stout. Fifteen lessons for teaching basic behind-the-wheel driving skills are included. In addition, the manual offers useful suggestions and information relevant to driver education for the handicapped.

Wisconsin Vocational Studies Center
1263 Educational Sciences Building
1025 W. Johnson
Madison, WI 53706
(608) 263-4151

Tindall, L.W., Gugerty, J.J., Crowley, C.B., Getzel, E.E., Salin, J., & Fessenden, P.K. *Puzzled about educating special needs students?: A handbook on modifying vocational curricula for handicapped students*. Madison, Wisconsin: Wisconsin Vocational Studies Center, 1980.

This handbook contains practical suggestions and strategies for the vocational training of handicapped students. Chapters cover the following topics: working with other professionals, emotional impairments of learning, learning disabilities, mental retardation, visual impairments, hearing impairments, physical impairments, vocational assessment -- both formal and informal -- and models of service delivery.

Ibid. *Puzzled about educating special needs students?: Annotated bibliography*. Madison, Wisconsin: Wisconsin Vocational Studies Center, 1980.

This annotated bibliography contains descriptions of 496 items. These items have been arranged into several categories. An individual citation was listed in two or more categories if appropriate. The categories include: comprehensive programming, administration, curriculum modifications, career education and employment, counseling and supportive services, individualized education programs , inservice and preservice training, legislation and litigation, mainstreaming, resources and bibliographies, specific disability areas, and assessment issues.

Ibid. *Puzzled about educating special needs students?: User's guide for the handbook on modifying vocational curricula for handicapped students*. Madison, Wisconsin: Wisconsin Vocational Studies Center, 1980.

The user's guide describes ways to organize and conduct inservice training in the major topics covered in each chapter of the handbook described above. In addition, the user's guide contains a chapter on the mechanics of organizing and conducting inservice meetings.

Appendix G

Distributor Outlets

Some of the products appearing in the catalog are available for sale at several locations. When a developer provided a listing of these locations, the For Sale section refers the reader to this appendix.

Bernina Sewing Machine (pg. 610)
Contact importer for nearest dealer

Swiss Bernina Inc.
534 W. Chestnut
Hinsdale, IL 60521

Larson Bernina Corporation
2017 E. 38th Street
Minneapolis, MN 55402

Bernina Sewing Machines Co., Inc.
70 Orchard Drive
North Salt Lake, UT 84054

Touch Fone Adapter (pg. 204)
Distributors

Buckeye Telephone & Supply
1250 Kinnear Road
Columbus, OH 43221
(614) 488-0655

GTE Automatic Electric
400 N. Wolf Road
Northlake, IL 60164
(312) 562-7100

Midwest Telephone Supply
P.O. Box 1319
Appleton, WI 54911
(414) 734-5632

North Supply Company
10951 Lakeview Avenue
Lenexa, KS 66215
(913) 888-9800

Sterling Products Co.
1575 Wyoming
Forty-Fort, PA 18704
(717) 288-7471

Mowat Sensor (pg. 494)

Australia

Wormald International Sensory Aids Ltd.
P.O. Box 2231
North Parramatta
NSW 2151
Australia

Europe

Wormald Interantional Sensory Aids
7 Musters Road
West Bridgford
Nottingham
NG 2 7 PP
England

Sonicguide (pg. 496)

Australia

Wormald International Sensory Aids Ltd.
P.O. Box 2231
North Parramatta
NSW 2151
Australia

Europe

Wormald International Sensory Aids
7 Musters Road
West Bridgford
Nottingham
NG 2 7 PP
England

All other countries

Wormald International Sensory Aids
P.O. Box 10014
Christchurch, New Zealand

Canon Electronic Calculator with Printout, Display and Voice

(pg. 462)

U.S.A.

Canon U.S.A., Inc.
10 Nevada Drive
Lake Success
Long Island, NY 11042

Canon U.S.A., Inc.
140 Industrial Drive
Elmhurst, IL 60126

Canon U.S.A., Inc.
123 Paularino Avenue East
Costa Mesa, CA 92626

Canon U.S.A., Inc.
6380 Peachtree Industrial
Boulevard
Norcross, GA 30071

Australia

Canon Australia Pty. Ltd.
22 Lambs Road
Artarmon
Sydney, N.S.W. 2064
Australia

Canada

Canon Optics & Business
Machines Canada, Ltd.
3245 American Drive
Mississauga, Ontario L4V 1N4
Canada

Canon Optics & Business
Machines Canada, Ltd.
5900 No. 2 Road
Richmond, B.C. V7C 4R9
Canada

Central and South America

Canon Latin America, Inc.
Sales Department
P.O. Box 7022
Panama 5
Rep. of Panama

Canon Latin America, Inc.
Repair Service Center
P.O. Box 2019
Colon Free Zone
Rep. of Panama

Europe, Africa & Middle East

Canon Amsterdam N.V.
P.O. Box 7907
1008 AC Amsterdam
the Netherlands

Japan

Canon Inc.
11028
Mita 3-chome
Minato-ku
Tokyo 108
Japan

Southeast Asia

Canon Hong Kong Trading Co., Ltd.
5th Floor 2-6
Fui Yiu Kok Street
Tsuen Wan
New Territories
Hong Kong

Large Letter Computer Print-Out (pg. 226)

(Printronix printer)
Distributors

Gentry Associates, Inc.
2109 W. Clinton Avenue
Room 130
Huntsville, AL 35805
(205) 534-9771
TWX: 810-726-2220

Oem Specialties
6900 E. Camelback Road
Scottsdale, AZ 85251
(602) 941-5646

Printronix
17421 Derian Avenue
P.O. Box 19559
Irvine, CA 92713
(714) 549-8272
(TWX: 910-595-2535

731

Group III Electronics
7263 Engineer Road
Suite D
San Diego, CA 92121
(714) 292-0525

Group III Electronics
542 Lakeside Drive, Suite 6
Sunnyvale, CA 94086
(408) 245-4392

Group III Electronics
2615 Manhattan Beach Boulevard
Redondo Beach , CA 90278
(213) 973-7844

Par Associates
10515 E. 40th Avenue
Suite 103
Denver, CO 80239
(303) 371-4140
TWX: 910-931-0409

Gentry Associates, Inc.
7527 Currency Drive
Orlando, FL 32809
(305) 859-7450
TWX: 810-850-0136

Gentry Associates, Inc.
9800 Grimes Bridge Road
Roswell, GA 30075
(404) 998-2828
TWX: 810-766-0805

Computer Services
875 Waimanu Street
Suite 614
Honolulu, HI 96813
(808) 531-5267

Dytec/Iowa
P.O. Box 2148
Iowa City, IA 52244
(319) 683-2282

Dytec/Central
315 W. University
Arlington Heights, IL 60004
(312) 394-3380
TWX: 910-687-2267

Dytec/Central
25 Beechway Drive
Indianapolis, IN 46224
(317) 247-1316

Dytec/South
8245 Nieman Road
Suite 123
Lenexa, KS 66214
(913) 888-0215

Gentry Associates
1799 Stumpf Boulevard
Bldg. 2, Suite 4B
Gretna, LA 70053
(504) 367-3975

S&S Electronics, Inc.
80 Stedman Street
Lowell, MA 01851
(617) 459-2578

Mesa, Inc.
16021 Industrial Drive
Gaithersburg, MD 20760
(301) 948-4350
TWX: 710-828-0231

Lowry & Associates, Inc.
8163 W. Grand River
Brighton, MI 48116
(313) 227-7067
TWX: 810-242-1519

Lowry & Associates, Inc.
3902 Costa N.E.
Grand Rapids, MI 49505
(616) 363-9839

Dytec/North
1821 University Avenue
Room 163 N
St. Paul, MN 55104
(612) 645-5816

Dytec/South
11657 Adie Road
Creve Coeur, MO 63141
(314) 731-5400

Dytec/South
11657 Adie Road
Maryland Heights, MO 63043
(314) 569-2990

Gentry Associates
428 Alamance Road
Burlington, NC 27215
(919) 227-3639
TWX: 510-921-5751

Technical Marketing Associates
2460 Lemoine Avenue
Ft. Lee, NJ 07024
(201) 224-6911
TWX: 710-991-9710

BFA Corporation
1704 Moon, S.E.
Suite 7
Albuquerque, NM 87112
(505) 292-1212
TWX: 910-989-1157

BFA Corporation
Corner of Hadley &
Motel Boulevard
Las Cruces, NM 88001
(505) 524-9693
TWX: 910-983-0543

Naco Electronics Corp.
P.O. Box 276
North Syracuse, NY 13212
(315) 699-2651
TWX: 710-541-0439

Lowry & Associates, Inc.
1440 Snow Road, Suite 216
Cleveland, OH 44134
(216) 398-0506
TWX: 810-427-9421

Lowry & Associates, Inc.
2194 Hewitt
Dayton, OH 45440
(513) 435-7684
TWX: 810-450-2672

Usdata Associates, Inc.
Box 33043
Tulsa, OK 74135
(918) 252-9646

Pacific Northwest Electronics
2035 S.W. 58th
Portland, OR 97221
(503) 297-8056

Denco Data Equipment Co.
25 Skippack Pike, Suite 106
Ambler, PA 19002
(215) 542-9876
TWX: 510-661-0638

Lowry & Associates
Seven Parkway Center
Suite 455
Pittsburgh, PA 15220
(412) 922-5110
TWX: 710-664-3080

Gentry Associates, Inc.
Greengate Park, Suite 302
Greenville, SC 29607
(803) 271-8543

Usdata Associates, Inc.
8701 Shoal Creek Boulevard
Bldg. 1, Suite 104
Austin, TX 78758
(512) 454-3579

Usdata Associates, Inc.
14241 Proton Road
Dallas, TX 75234
(214) 661-9633

Usdata Associates, Inc.
4120-A Directors Row
Houston, TX 77092
(713) 681-0200

Par Associates
1167 N. Deerfield Drive
Centerville, UT 84014
(801) 292-8145

Pacific Northwest Electronics
2020 116 NE
Bellevue, WA 98004
(206) 454-0150

Canada

Adhearn & Soper
31 Enterprise Road
Rexdale, Ontario,
Canada M9W 1C4
(416) 245-4848
TLX: 06-965-770

Puerto Rico

Computec Systems Corp.
GPO Box 1429
San Juan, Puerto Rico
(809) 781-7880
TWX: 325-2326

A7 Speech Controller (pg. 546)
Variable Speed Control™ Listening Adapter (pg. 576)
Dealers

Educational Products
Div. of Ebsco Ind., Inc.
1230 First Avenue No.
Birmingham, AL 35203
(205) 252-1212

and

2714 Government Boulevard
Mobile, AL 36606
(205) 479-9441

NVS Systems Inc.
4609 Business Park Boulevard
Anchorage, AK 99503
(907) 279-5571

Audio Graphic Supply, Inc.
P.O. Box 177
Lake Havasu City, AZ 86430
(602) 855-3983
(800) 352-1425

and

2105 South Hardy, Suite #3
Tempe, AZ 85281
(602) 894-2148

and

P.O. Box 50446
Tucson, AZ 85703
(602) 297-9574

Fairview Audio-Visual Co.
3520 West 69th Street
Suite 102
Little Rock, AR 72209
(501) 568-7446

E.I.S.I.
Instructional Systems
Div. of Educational
Industrial Sales, Inc.
2225 Grant Road, Suite #3
Los Altos, CA 94022

McCurry A/V Co.
13th and Kay Streets
Sacramento, CA 95814
(916) 444-6080

Audio Graphic Supply, Inc.
810 Waterman Avenue
P.O. Box 986
San Bernadino, CA 92402
(714) 888-1395

and

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